

A photograph of a forest with tall, thin trees. The sun is shining from the left, creating a bright flare and casting long shadows. The ground is covered in grass and fallen branches.

CRC PRESS

Fall 2018 CRC Press Rights Catalog

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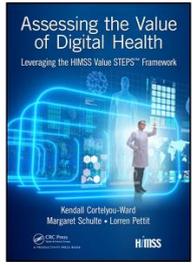
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Assessing the Value of Digital Health

Leveraging the HIMSS Value STEPS™ Framework



Kendall Cortelyou-Ward, Margaret Schulte and Lorren Pettit

Series: *HIMSS Book Series*

This book will leverage the HIMSS Value STEPS™ model to identify and define the expressions of value the use of health IT systems can yield per the following domains: satisfaction, treatment/Clinical, Electronic Secure Data, Patient Engagement and Population Health, and savings. The book will describe the STEPS model, and use the content in the HIMSS EHR Value Collection to demonstrate the impact of health IT in healthcare organizations, and the quality of care and overall financial and operational performance improvements that have been

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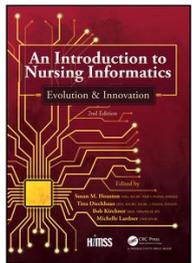
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Niels Loader

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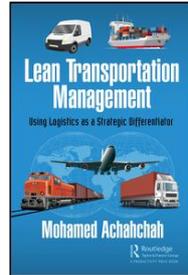
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Mohamed Achahchah

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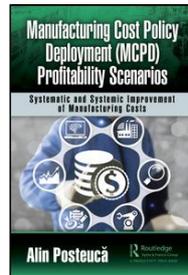
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Systematic and Systemic Improvement of Manufacturing Costs



Alin Posteuca, Managing Partner - Exegens Management Consultants

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Market: Business & Management

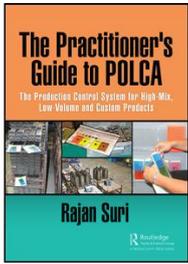
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Rajan Suri

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Muhammad Mashhood Alam

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Edited by Seweryn Spalek

Series: Data Analytics Applications

This book aims to help the reader better understand the importance of data analysis in project management. Moreover, it provides guidance by showing tools, methods, techniques and lessons learned on how to better utilize the data gathered from the projects. First and foremost, insight into the bridge between data analytics and project management aids practitioners looking for ways to maximize the practical value of data procured. The book equips organizations with the know-how necessary to adapt to a changing workplace dynamic through key lessons learned from past ventures. The book's integrated approach to investigating both fields enhances the value of research findings.

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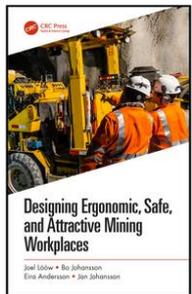
November 2018: 6-1/8 x 9-1/4: 222pp

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Designing Ergonomic, Safe, and Attractive Mining Workplaces



Joel Lööw, Lulea University of Technology, Lulea, Sweden, Bo Johansson, Eira Andersson, Lulea University of Technology, Lulea, Sweden and Jan Johansson, Lulea University of Technology, Lulea, Sweden

Securing a future workforce has been identified as a challenge for the mining industry. Due to an ageing workforce, the geographical location of the mine, and the view of mining work as dark, dirty, and dangerous, along with the technological and automation advances, it is necessary for younger and more qualified workers to enter the field. Therefore a requirement to design an ergonomic, safe and attractive workplace for mines is needed. This book provides an introduction, takes a holistic approach, introduces a systematic and iterative design and

planning process, gives a review of current and future issues in mining, and offers a checklist to aid in the new designing and planning process.

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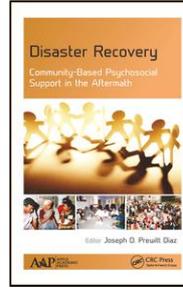
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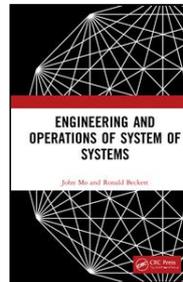
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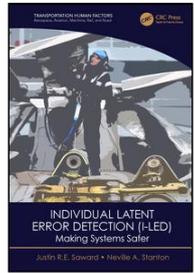
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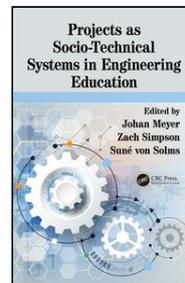
within existing safety systems as an additional control to enhance resilience against human performance variability.

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Market: Ergonomics & Human Factors
 October 2018: 6-1/8 x 9-1/4: 184pp
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Projects as Socio-Technical Systems in Engineering Education



Edited by Johan Meyer, University of Johannesburg, Zach Simpson, University of Johannesburg and Suné von Solms, University of Johannesburg

This book presents the case for Project-Based Learning within Socio-Technical Systems in Engineering Education. It will enable engineering educators to develop curricula that can respond to societal needs, while also enhancing teaching and learning. University, government and industry leaders will gain from this book as it provides insight into strategic planning and partnership-building for Engineering Education. It highlights the importance of projects as Socio-Technical Systems; supporting and enhancing international accreditation of engineering programs. Practical examples illustrate how Socio-Technical

Systems are brought into the educational environment through Project-Based Learning.

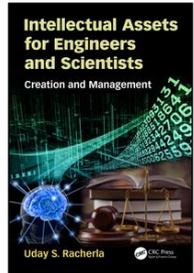
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Creation and Management



Uday S. Racherla, Indian Institute of Technology Kanpur, Kanpur, India

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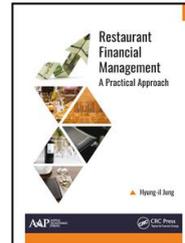
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A Practical Approach



Hyung-il Jung

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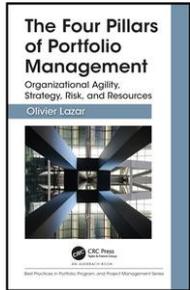
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Olivier Lazar

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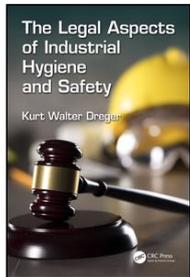
October 2018: 6-1/8 x 9-1/4: 170pp

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Kurt W. Dreger, ES&H Deputy Assurance Manager & Legal Analyst, Lawrence Livermore National Lab., California, USA

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that arise in IH/S practice and will be helpful to new IH/S managers as they progress in their careers.

CRC Press

Market: Occupational Health & Safety

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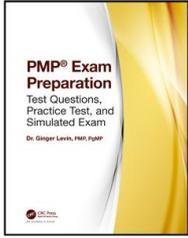
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Dr. Ginger Levin, PMP, PgMP, Consultant, Lighthouse Point, Florida, USA

Fully updated to be aligned with the *Project Management Body of Knowledge® (PMBOK® Guide), Sixth Edition*, this study guide is structured per the *PMP® Examination Content Outline (ECO), 2015* edition, which is the blueprint for the PMP® exam. The study guide has a chapter of 50 questions for each performance domain in the ECO: initiating, planning, executing, monitoring and controlling, and closing. A new chapter with questions on key concepts ensures complete coverage of all knowledge areas in the *PMBOK® Guide*. The study guide also provides access to a

200-question on-line test that simulates the experience of taking the actual PMP® examination.

Auerbach Publications

Market: Business & Management

October 2018: 8-1/2 x 11: 406pp

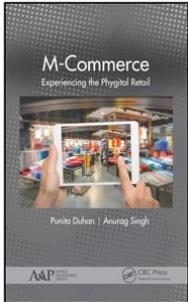
Pb: 978-0-815-37910-2: **\$79.95**

eBook: 978-0-429-02467-2

* For **full contents** and more information, visit: www.crcpress.com/9780815379102

M-Commerce

Experiencing the Phygital Retail



Edited by **Punita Duhan** and **Anurag Singh**

This volume presents a pragmatic approach to understanding and capitalizing on contemporary m-commerce trend. It comprehensively encapsulates the evolution, emergent trends, hindrances and challenges, and customer perceptions about various facets of how physical and online retail channels are merging, blurring, and influencing each other in new ways.

Apple Academic Press

Market: Information Technology

November 2018: 6 x 9: 397pp

Hb: 978-1-771-88714-4: **\$149.95**

eBook: 978-0-429-48773-6

* For **full contents** and more information, visit: www.crcpress.com/9781771887144

How Well Do Executives Trust Their Intuition

Edited by **Jay Liebowitz**, Harrisburg University of Science and Technology, Pennsylvania, USA, **Yolande Chan**, **Tracy Jenkin**, **Dylan Spicker**, **Joanna Paliszkiwicz** and **Fabio Babiloni**, University of Rome, La Sapienza, Italy

Series: Data Analytics Applications

In this age of "big data", knowledge gained from experiential learning may be taking a back seat to analytics. But, the use of intuition should play an important role in the decision process. This book covers the Fulbright research study conducted by the authors. The main question is: How well do executives trust their intuition? In other words, do they typically prefer intuition over analysis/analytics, and what types of intuition (Holistic-Big Picture, Holistic-Abstract, Affective Intuition, Inferential Intuition) may be most favorable looking at different variables? The research utilizes survey and biometrics approaches using C-level executives from Canada, U.S., Poland, and Italy.

Auerbach Publications

Market: Computer Science & Engineering

January 2019: 6-1/8 x 9-1/4: 184pp

Hb: 978-1-138-49262-2: **\$129.95**

eBook: 978-0-429-02226-5

* For full contents and more information, visit: www.crcpress.com/9781138492622

Intelligence in IoT-enabled Smart Cities

Fadi Al-Turjman

Smart Cities and intelligence are among the most significant topics in IoT. Intelligence in communication and infrastructure implementation is at the heart of this concept, and its development is a key issue in smart cities. This book addresses the challenges in realizing intelligence in smart cities and sensing platforms in the era of cloud computing and IoT, varying from cost and energy efficiency to availability and service quality. It focuses on both the design and implementation aspects of artificial intelligence approaches in smart cities and sensing applications that are enabled and supported by IoT paradigms, and mainly on data delivery approaches and their performability aspects.

CRC Press

Market: Engineering - Electrical

January 2019: 6-1/8 x 9-1/4: 232pp

Hb: 978-1-138-31684-3: **\$129.95**

eBook: 978-0-429-02245-6

* For full contents and more information, visit: www.crcpress.com/9781138316843

Introduction to Python for Science and Engineering

David J. Pine, New York University, NY, USA

Series: Series in Computational Physics

This guide offers a rapid introduction to Python programming to anyone with no experience in programming, taking a careful and methodical approach to presenting the features available and their use for performing practical scientific and engineering tasks. It shows why Python is such a widely appealing program, covering its syntax, data structures, input and output, plotting, conditionals and loops, user-defined functions, curve fitting, and numerical routines. The text includes detailed instructions on how to install Python on Windows, Apple, and Linux platforms. It includes dedicated chapters on animation, object-oriented programming, and how to use Jupyter notebooks.

CRC Press

Market: Computer Science & Engineering

October 2018: 6-1/8 x 9-1/4: 364pp

Hb: 978-1-138-58390-0: **\$129.95**

Pb: 978-1-138-58389-4: **\$59.95**

eBook: 978-0-429-50641-3

* For full contents and more information, visit: www.crcpress.com/9781138583894

Link State Routing

Principles and Technologies

Rui Valadas

The book describes and compares both the IPv4 and IPv6 versions of OSPF and IS-IS. It explains OSPF and IS-IS by grounding the analysis on the principles of link state routing. It deliberately separate principles from technologies. The chapters on principles explain the features of LSR protocols and discuss the alternative design options, independently of technologies. The chapters on technologies provide a comprehensive description of OSPF and IS-IS with sufficient detail for professionals that need operate these technologies. The final chapter describes and discusses a set of experiments with Cisco routers designed to illustrate the various features of OSPF and IS-IS.

CRC Press

Market: Engineering - Electrical

January 2019: 6-1/8 x 9-1/4: 320pp

Hb: 978-1-138-50455-4: **\$69.95**

eBook: 978-0-429-02754-3

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Opportunistic Networking

Models, Protocols, and Applications

Yong Li and Pan Hui

Opportunistic networks forms one of the two major categories of multi-hop ad hoc networks, which are widely used in many scenarios. Applications on opportunistic networks have been on mobile network, space networks, online social networks, and underwater networks, etc. This book introduces opportunistic networking by combining fundamental mathematical models, system architecture/protocols, and practical applications. The book summarizes the main outcomes and investigation of opportunistic networks and provides the overview picture and system training for newcomers to this promising area.

CRC Press

Market: Engineering - Electrical

April 2019: 6-1/8 x 9-1/4: 320pp

Hb: 978-1-498-77559-5: **\$159.95**

eBook: 978-1-315-36701-9

* For full contents and more information, visit: www.crcpress.com/9781498775595

Software Defined-WAN for the Digital Age

A Bold Transition to the Next Generation Network

David Wang

SD-WAN is an advanced networking approach that creates hybrid networks to integrate broadband or other network services into the corporate WAN, not only just handling general business workloads and traffic, but also being capable of maintaining the performance and security of real-time and sensitive applications. This book posits that Software Defined (SD) WAN is the answer to questions such as what changes can be made to the networking sector? What innovations can make WAN, which plays a vital integrated part of the cloud ecosystem, more cost effective, performance robust, provisioning efficient, and operation intelligent?

CRC Press

November 2018: 6-1/8 x 9-1/4: 124pp

Hb: 978-1-138-34599-7: **\$49.95**

eBook: 978-0-429-43062-6

* For full contents and more information, visit: www.crcpress.com/9781138345997

Software Engineering for Variability Intensive Systems

Foundations and Applications

Edited by **Ivan Mistrik**, **Matthias Galster** and **Bruce R. Maxim**

This book addresses the challenges in the software engineering of variability-intensive systems. Variability-intensive systems can support different usage scenarios by accommodating different and unforeseen features and qualities. The book features academic and industrial contributions that discuss the challenges in developing, maintaining and evolving systems, cloud and mobile services for variability-intensive software systems and the scalability requirements they imply. The book explores software engineering approaches that can efficiently deal with variability-intensive systems as well as applications and use cases benefiting from variability-intensive systems.

Auerbach Publications

Market: Information Technology
January 2019: 6-1/8 x 9-1/4: 384pp
Hb: 978-0-815-34805-4: \$129.95
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* For full contents and more information, visit: www.crcpress.com/9780815348054

TEXTBOOK · READER

Software Engineering

Best Practices with Open Source Tools

Jonathan Lee and **Alan Liu**

Providing readers with essential knowledge in software engineering, this book contains the best practices that are ready to use for real problems. It emphasizes open source tools and covers up-to-date challenges of software development with easy-to-understand case studies. Not bound by a single theory and concept alone, readers can use it as a tool book to attack real life problems as well as a reference book to keep up with the current trends and core knowledge in software engineering.

CRC Press

Market: Information Technology
August 2019: 6-1/8 x 9-1/4: 340pp
Hb: 978-1-482-25113-5: \$99.95

* For full contents and more information, visit: www.crcpress.com/9781482251135

Understanding Interaction

The Art and Craft of Designing Interfaces for Our Technological Environment

Bert Bongers, University of Technology, Sydney, Australia

This book brings together perspectives and knowledge from a wide range of disciplines. It defines and explains what actually happens in the interaction between people and technology as a basis for the design and implementation of better interfaces. The book demystifies technology by placing it in a historical context and relating social and cultural developments to technical advances. It also presents new frameworks, design tools, and techniques from theory to practice.

Auerbach Publications

Market: Computer Science & Engineering
April 2019: 6-1/8 x 9-1/4: 320pp
Hb: 978-1-482-22862-5: \$79.95
eBook: 978-1-482-22863-2

* For full contents and more information, visit: www.crcpress.com/9781482228625

CIO's Guide to Security Incident Management



Matthew William Arthur Pemble and Wendy Fiona Goucher

This book will help IT and business operations managers who have been tasked with addressing security issues. It provides a solid understanding of security incident response and detailed guidance in the setting up and running of specialist incident management teams. Having an incident response plan is required for compliance with government regulations, industry standards such as PCI DSS, and certifications such as ISO 27001. This book will help organizations meet those compliance requirements.

Auerbach Publications

Market: Information Security Management

November 2018: 6-1/8 x 9-1/4: 238pp

Hb: 978-1-466-55825-0: \$69.95

eBook: 978-1-466-55826-7

* For full contents and more information, visit: www.crcpress.com/9781466558250

CISO COMPASS

Navigating Cybersecurity Leadership Challenges with Insights from Pioneers

Todd Fitzgerald, Grant Thornton International, Ltd., Oak Brook Terrace, Illinois, USA

The book provides direction for leading an information security program from the perspective of the Chief Information Security Officer (CISO). The book is a 'how-to-book' regarding the important areas for the CISO to consider when building and sustaining an information security program. Contains insights into the experiences of 75 CISO obtained through surveys, interviews, and case studies.

Auerbach Publications

Market: Information Technology

December 2018: 6-1/8 x 9-1/4: 536pp

Hb: 978-1-498-74044-9: \$79.95

eBook: 978-0-429-39901-5

* For full contents and more information, visit: www.crcpress.com/9781498740449

Cybersecurity and Privacy in Cyber Physical Systems

Edited by Yassine Maleh

This book encourages both researchers and practitioners to share and exchange their experiences and recent studies between academia and industry to highlight and discuss the recent development and emerging trends cybercrime and computer digital forensics in the Cloud of Things; to propose new models, practical solutions, and technological advances related to cybercrime and computer digital forensics in the Cloud of Things; and to discuss new cybercrime and computer digital forensics models, prototypes, and protocols for the Cloud of Things environment.

CRC Press

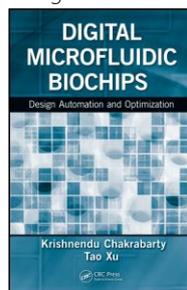
May 2019: 6-1/8 x 9-1/4

Hb: 978-1-138-34667-3: \$119.95

* For full contents and more information, visit: www.crcpress.com/9781138346673

Digital Microfluidic Biochips

Design Automation and Optimization



Krishnendu Chakrabarty, Duke University, Durham, North Carolina, USA and Tao Xu, Cisco Systems, Cary, North Carolina, USA

Microfluidics-based biochips combine electronics with biochemistry for newly emerging application areas such as point-of-care medical diagnostics, on-chip DNA analysis, automated drug discovery, and protein crystallization. This book envisions an automated design flow for microfluidic biochips. It offers newly designed automation solutions for problems unique to digital microfluidics. The authors provide a comprehensive methodology for the automated design, test, and use of robust and low-cost manufactured digital microfluidic systems. Using real-life bioassays as examples, they offer a

comprehensive set of practical methodologies and tools for chip design and manufacture.

CRC Press

May 2010: 6-1/8 x 9-1/4: 213pp

Hb: 978-1-439-81915-9: \$210.00

Pb: 978-1-138-11240-7: \$79.95

eBook: 978-1-439-81916-6

* For full contents and more information, visit: www.crcpress.com/9781439819159

Enterprise Architecture for Digital Business

Integrated Transformation Strategies

Tushar K. Hazra, EpitomiOne, Ellicott City, Maryland, USA and Bhuvan Unhelkar, Consultant, Wahroonga, Australia

Enterprise Architecture (EA) is the technical fabric of an enterprise. However, EA also transcends technology and moves into business space. Therefore, EA needs to be discussed in an integrated, holistic manner. Only such an integrated EA can provide the necessary basis for a business transformation that makes the business ready for the myriad business and technological challenges it will invariably face. For example, Big Data, mobile and cloud computing are all highly disruptive technologies that require a fine balance between their business and technical aspects as the organization moves forward. The book focuses on preparing organizations for the impact of these disruptive technologies.

Auerbach Publications

Market: Information Technology

July 2019: 6-1/8 x 9-1/4: 352pp

Hb: 978-1-498-72788-4: \$79.95

eBook: 978-1-498-72790-7

* For full contents and more information, visit: www.crcpress.com/9781498727884

Handbook of Magnetic Random Access Memory

Weisheng Zhao and Wang Kang

Spintronics is a promising technology as one of the alternatives to the traditional memory technology. MRAM is one of the major applications of Spintronics. The authors offer the first comprehensive book on MRAM. It is structured to be a complete and updated guide for the readers. This book provides an overview of the state of the art, describes industrial applications, and presents original technologies in this rapidly-moving field. It covers aspects from physics, device, circuit, and system to application of MRAM. The book provides the necessary skills, tools and guidelines for different-level MRAM designers. It also summarizes the challenges and prospects of MRAM.

CRC Press

Market: Engineering - Electrical

April 2019: 6-1/8 x 9-1/4: 304pp

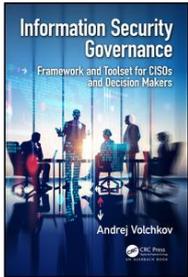
Hb: 978-1-498-75469-9: \$249.95

eBook: 978-1-498-75470-5

* For full contents and more information, visit: www.crcpress.com/9781498754699

Information Security Governance

Framework and Toolset for CISOs and Decision Makers



Andrej Volchkov

This book presents a framework to model the main activities of information security management and governance. The same model can be used for any security sub-domain such as cybersecurity, data protection, access rights management, business continuity, etc. Provides security managers with the necessary tools to enable them to fulfill their role and thus meet the needs of the company and its customers. Managers will find elements that enable them to better understand security, ask relevant questions, or request pertinent reports.

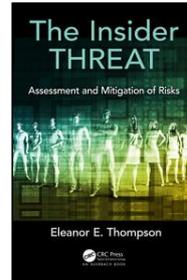
Auerbach Publications

Market: Information Technology
October 2018: 6-1/8 x 9-1/4: 252pp
Pb: 978-0-815-35644-8: **\$69.95**
eBook: 978-0-429-43653-6

* For full contents and more information, visit: www.crcpress.com/9780815356448

The Insider Threat

Assessment and Mitigation of Risks



Eleanor E. Thompson, U.S. Coast Guard

This book provides emergent knowledge relating to physical, cyber, and human risk mitigation in a practical and readable approach for the corporate environment. It presents and discusses practical applications of risk management techniques along with useable practical policy change options. This practical organizational security management approach examines multiple aspects of security to protect against physical, cyber, and human risk. A practical more tactical focus includes managing vulnerabilities and applying countermeasures. The book guides readers to a greater depth of understanding and action-oriented options.

Auerbach Publications

Market: Information Technology
December 2018: 6-1/8 x 9-1/4: 240pp
Hb: 978-1-498-74708-0: **\$79.95**
eBook: 978-1-498-74709-7

* For full contents and more information, visit: www.crcpress.com/9781498747080

Inside Blockchain, Bitcoin, and Cryptocurrencies

Niaz Chowdhury

This book covers blockchain from the underlying principles to how it enables applications to survive and surf on its shoulder. Having covered the fundamentals of blockchain, the book turns to cryptocurrency. It thoroughly examines Bitcoin before presenting six other major currencies in a rounded discussion. The book then bridges between technology and finance, concentrating on how blockchain-based applications, including cryptocurrencies, have pushed hard against mainstream industries in a bid to cement their positions permanent. It discusses blockchain as underlying banking technology, crypto mining and offering, cryptocurrency as investment instruments, crypto regulations, and markets.

Auerbach Publications

Market: Computer Science & Engineering
April 2019: 6-1/8 x 9-1/4
Hb: 978-1-138-61815-2: **\$59.95**

* For full contents and more information, visit: www.crcpress.com/9781138618152

User-Centric and Information-Centric Networking and Services

Access Networks and Emerging Trends

M. Bala Krishna, University School of Information and Communication Technology, GGS, Indraprastha University, Delhi, India

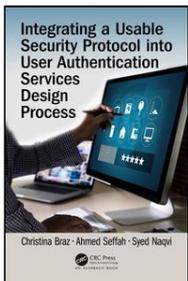
User-Centric Networks (UCN) and Information-Centric Networks (ICN) are new communication paradigms to increase the efficiency of content delivery and also content availability. In this new concept, the network infrastructure actively contributes to content caching and distribution. This book presents the basic concepts of UCN and ICN, describes the main architecture proposals for these networks, and discusses the main challenges to their development. The book also looks at the current challenges for this concept, including naming, routing and caching on the network-core elements, several aspects of content security, user privacy, and practical issues in implementing UCN and ICN.

CRC Press

March 2019: 6-1/8 x 9-1/4: 320pp
Hb: 978-1-138-63332-2: **\$129.95**
eBook: 978-1-315-20765-0

* For full contents and more information, visit: www.crcpress.com/9781138633322

Integrating a Usable Security Protocol into User Authentication Services Design Process



Christina Braz, Ahmed Seffah and Bilal Naqvi

There is an intrinsic conflict between creating secure systems and usable systems. But usability and security can be made synergistic by providing requirements and design tools with specific usable security principles earlier in the requirements and design phase. In certain situations, it is possible to increase usability and security by revisiting design decisions made in the past; in others, to align security and usability by changing the regulatory environment in which the computers operate. This book addresses creation of a usable security protocol for user authentication as a natural outcome of the requirements and design phase of the authentication method development life cycle.

Auerbach Publications

Market: Information Technology
November 2018: 6-1/8 x 9-1/4: 394pp
Hb: 978-1-138-57768-8: **\$69.95**
eBook: 978-0-429-43527-0

* For full contents and more information, visit: www.crcpress.com/9781138577688

The 21st Century Meeting and Event Technologies

Powerful Tools for Better Planning, Marketing, and Evaluation



Seungwon "Shawn" Lee, George Mason University, Manassas, Virginia, USA, **Dessislava Boshnakova** and **Joe Goldblatt**, Point Pleasant, New Jersey, USA

This is the first book in the field of meeting and event education to specifically and comprehensively address the area of technology. It includes examples of technology platforms, software, cloud-based systems, case studies, checklists, financial investments, educational resources, and other valuable information. Each chapter addresses the key competencies (standards) of the Meeting Professionals International Event Management International Competency Standards (EMICS). Each technology platform will directly support one of the standards identified through EMICS to ensure a correct fit with current and future industry expectations.

Apple Academic Press

Market: Business Management

July 2016: 7 1/2 x 9 1/2: 378pp

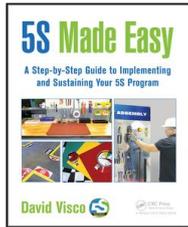
Hb: 978-1-771-88023-7: **\$150.00**

eBook: 978-1-315-36662-3

* For full contents and more information, visit: www.crcpress.com/9781771880237

5S Made Easy

A Step-by-Step Guide to Implementing and Sustaining Your 5S Program



David Visco, President -- The 5S Store, LLC

For decades, 5S practitioners have struggled with exactly how to implement and sustain a 5S program in their workplaces. While there are many books available on the organization methods suggested by 5S, few provide easy-to-understand, step-by-step guidance on how to set up and sustain successful 5S implementations. 5S Made Easy fills this need. Written by an expert whose focus for the last decade has been nothing but 5S, the book supplies in-depth guidance on how to implement and sustain each of the 5S pillars—sort, set in order, shine, standardize, and sustain.

Productivity Press

Market: Business & Management

October 2015: 8-1/2 x 11: 92pp

Hb: 978-1-138-40935-4: **\$195.00**

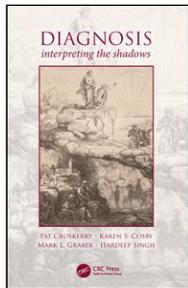
Pb: 978-1-498-71982-7: **\$51.95**

eBook: 978-1-498-71983-4

* For full contents and more information, visit: www.crcpress.com/9781498719827

Diagnosis

Interpreting the Shadows



Pat Croskerry, Professor, Department of Emergency Medicine; Director, Critical Thinking Program, Division of Medical Education, Dalhousie University, Halifax, Nova Scotia, Canada, **Karen Cosby**, Associate Professor, Rush Medical School; Chair, Division of Observation and Quality and Department of Emergency Medicine, Cook County Health and Hospital System, Chicago, IL, **Mark L. Graber**, President, Society to Improve Diagnosis in Medicine; Senior Fellow, RTI International; Professor Emeritus Stony Brook University and **Hardeep Singh**, Michael E. DeBakey Veterans Affairs Medical Center and Baylor College of Medicine, Houston, Texas

Despite diagnosis being the key feature of a physician's clinical performance, this is the first book that deals specifically with the

topic. In recent years, however, considerable interest has been shown in this area and significant developments have occurred in two main areas: a) an awareness and increasing understanding of the critical role of clinical decision making in the process of diagnosis, and of the multiple factors that impact it, and b) a similar appreciation of the role of the healthcare system in supporting clinicians in their efforts to make accurate diagnoses.

CRC Press

Market: Ergonomics & Human Factors

May 2017: 6-1/8 x 9-1/4: 370pp

Hb: 978-1-138-74339-7: **\$119.95**

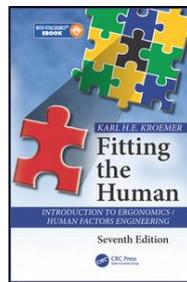
Pb: 978-1-409-43233-3: **\$49.95**

* For full contents and more information, visit: www.crcpress.com/9781409432333

7th Edition · TEXTBOOK · READER

Fitting the Human

Introduction to Ergonomics / Human Factors Engineering, Seventh Edition



Karl H.E. Kroemer, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA

This new edition undergraduate introductory textbook follows the motto of the previous versions: "Solid information, easy-to-read, easy to understand, easy to apply." The aim remains the same: "Human engineering" workplaces, tools, machinery, computers, lighting, shiftwork, work demands, the environment, officers, vehicles, the home – and everything else that we can design to fit the human. The new edition is up-to-date in content and language, in data and illustrations. Like previous versions, this book is for students and professionals in engineering, design, architecture, safety and management and to everybody else who wants to make work safe, efficient, satisfying, and even

enjoyable.

CRC Press

Market: Ergonomics & Human Factors

January 2017: 6-1/8 x 9-1/4: 461pp

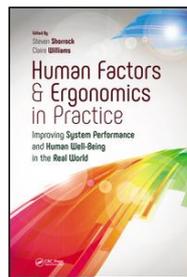
eBook: 978-1-315-39838-9

Pack - Book and Ebook: 978-1-498-74689-2: **\$69.95**

* For full contents and more information, visit: www.crcpress.com/9781498746892

Human Factors and Ergonomics in Practice

Improving System Performance and Human Well-Being in the Real World



Edited by **Steven Shorrock**, Eurocontrol Experimental Center, Cedex, France and **Claire Williams**, University of Derby, Loughborough, United Kingdom

This book is a guide to better understanding and utilising the real practice of human factors and ergonomics (HFE), conveying the perspectives and experiences of practitioners and other stakeholders in a variety of industrial sectors, organisational settings and working contexts. It blends the extant literature on the nature of practice (including research application) with reflections from experience, and offers insights into the achievement (and non-achievement) of the core goals of HFE, namely improved system performance and human well-being.

CRC Press

Market: Ergonomics and Human Factors

December 2016: 6-1/8 x 9-1/4: 422pp

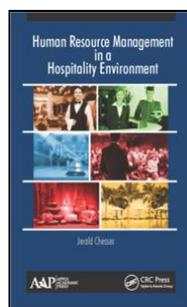
Pb: 978-1-472-43925-3: **\$51.95**

eBook: 978-1-315-58733-2

* For full contents and more information, visit: www.crcpress.com/9781472439253

TEXTBOOK · READER

Human Resource Management in a Hospitality Environment



Jerald Chesser

This new textbook provides a complete study of human resource management from the perspective of management and operation in a hospitality environment. The hospitality industry continues to grow every day, bringing new challenges and opportunities. This up-to-date textbook provides the information on effective human resource management that managers need to know to succeed in today's competitive hospitality business environment.

Apple Academic Press

Market: Business & Management

May 2016: 7 x 10: 284pp

Hb: 978-1-771-88300-9: **\$105.00**

eBook: 978-1-771-88301-6

* For full contents and more information, visit: www.crcpress.com/9781771883009

Innovation Crisis

Successes, Pitfalls, and Solutions in Japan



Eichii Yamaguchi

What has gone wrong in Japan that has led to this innovation crisis? This quest spanned 18 years and several academic disciplines, and initially it appeared it had no context. But only after putting all the different pieces together did Prof. Yamaguchi realize that it was actually one story. In this completely new, meaningful, and interesting book, he integrates his research on innovation policy, innovation theory, and trans-science. He begins the book with a detailed story of the innovation of blue LEDs for which three Japanese scientists received Nobel Prize in physics in 2014.

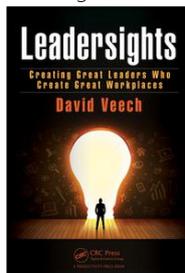
Pan Stanford

Market: Business Management
November 2018: 6 x 9: 300pp
Hb: 978-9-814-77497-0: \$79.95
eBook: 978-0-429-44862-1

* For full contents and more information, visit: www.crcpress.com/9789814774970

Leadersights

Creating Great Leaders Who Create Great Workplaces



David Veech, The Institute for Lean Systems (ILS), Louisville, Kentucky, USA

This book focuses on how organizations of all types can create a leader development system that defines critical leader behaviors, gives simple techniques for building and improving the skills that drive those behaviors, and gives a mechanism for monitoring and enforcing those behaviors. It spells out how leaders can do the same for their employees; defining and promoting behaviors required for sustaining continuous change. The book synthesizes current research on change, servant leadership, group and team dynamics, job satisfaction, intrinsic motivation, psychological flow, and individual self-efficacy.

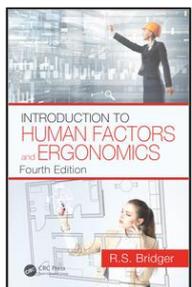
Productivity Press

Market: Business & Management
February 2017: 6-1/8 x 9-1/4: 210pp
Hb: 978-1-466-55800-7: \$41.95
eBook: 978-1-315-16322-2

* For full contents and more information, visit: www.crcpress.com/9781466558007

4th Edition · TEXTBOOK · READER

Introduction to Human Factors and Ergonomics



Robert Bridger, Director of Knowledge Sharing Events, a limited company registered in the United Kingdom

Building on the success of previous editions, the 4th edition of 'Introduction to Human Factors and Ergonomics' provides a comprehensive and up to date introduction to the field. The new edition places the subject matter into a system context using a human-machine model to structure the chapters and a knowledge application model to structure the organisation of material in each chapter. Every chapter covers: Core Concepts, Basic Applications, Tools and Processes, and System Integration issues regardless of topic. Includes over 200 exercises and essays (at least ten per chapter).

CRC Press

Market: Ergonomics & Human Factors
November 2017: 6-3/4 x 9-1/2: 770pp
eBook: 978-1-498-79595-1

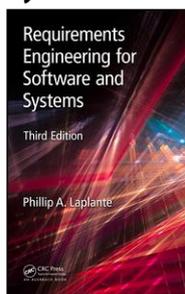
Pack - Book and Ebook: 978-1-498-79594-4: \$99.95

* For full contents and more information, visit: www.crcpress.com/9781498795944



3rd Edition · TEXTBOOK · READER

Requirements Engineering for Software and Systems



Phillip A. Laplante, The Pennsylvania State University, Malvern, USA

Series: *Applied Software Engineering Series*

Solid requirements engineering has increasingly been recognized as the key to improved, on-time and on-budget delivery of software and systems projects. This new edition illustrates key ideas associated with requirements engineering using extensive case studies and three common example systems: an airline baggage handling system, a point-of-sale system for a large pet store chain, and a system for a smart home. In addition to new exercises and updated references in every chapter, this edition updates all chapters with the latest applied research and industry practices. It also presents new material derived from the experiences of professors who have used the text in their classrooms.

Auerbach Publications

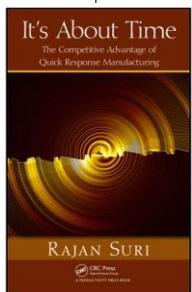
Market: Information Technology
October 2017: 6-1/8 x 9-1/4: 378pp
Hb: 978-1-138-19611-7: \$99.95
eBook: 978-1-315-30371-0
Prev. Ed Hb: 978-1-466-56081-9

* For full contents and more information, visit: www.crcpress.com/9781138196117



It's About Time

The Competitive Advantage of Quick Response Manufacturing



Rajan Suri, Founding Director, Center for Quick Response Manufacturing, Madison, Wisconsin, USA

Presenting the developments in QRM since the publication of Rajan Suri's landmark text, *Quick Response Manufacturing*, this book illustrates how QRM can not only reduce lead times but also improve quality, reduce operating costs, and enable companies to gain a substantial market share. It explains how factories in advanced nations can use QRM strategy to compete with manufacturers in low-wage countries and provides helpful pointers for QRM implementation. It also includes a CD with time-saving tips to help you work through implementation issues.

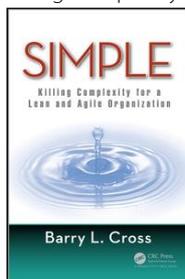
Productivity Press

March 2010: 6-1/8 x 9-1/4: 228pp
Hb: 978-1-439-80595-4: \$49.95
eBook: 978-1-439-80596-1

* For full contents and more information, visit: www.crcpress.com/9781439805954

Simple

Killing Complexity for a Lean and Agile Organization



Barry L. Cross, Queen's University, Kingston, Ontario, Canada

This book is about agility and simplicity, where achieving simplicity comes from a focus on the customer. By understanding who those customers are, and what they want, we enable the organization to focus our innovation strategy and projects in ways that deliver sustainable value. Even in not-for-profit and government agencies, executing in an aligned organization can become a way of life.

Productivity Press

Market: Business & Management
May 2017: 6-1/8 x 9-1/4: 185pp
Hb: 978-1-138-71343-7: \$39.95
eBook: 978-1-315-19875-0

* For full contents and more information, visit: www.crcpress.com/9781138713437

The Internet of Things

Enabling Technologies, Platforms, and Use Cases



Pethuru Raj, IBM Pvt.Ltd., Manyata Tech Park, Bangalore, India and **Anupama C. Raman**, IBM Pvt.Ltd., Manyata Tech Park, Bangalore, India

With the fast evolution and spread of very powerful tools and technologies, the realization of the Internet of Things (IoT) is getting simplified and accelerated by the technology players across the world. This book provides substantial information and insight to readers about the role and relevance of IoT infrastructures, platforms, tools and technologies. This book examines in-depth the emerging trends, competent technologies, enabling techniques, and facilitating tools, in an easy-to-grasp manner which in turn provides valuable tips for

the design and creation of the next-generation Internet.

Auerbach Publications

Market: Information Technology

March 2017: 7 x 10: 364pp

Hb: 978-1-498-76128-4: **\$93.95**

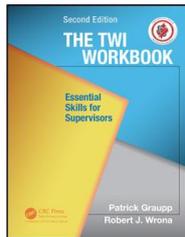
eBook: 978-1-315-27039-5

* For full contents and more information, visit: www.crcpress.com/9781498761284

2nd Edition

The TWI Workbook

Essential Skills for Supervisors, Second Edition



Patrick Graupp, TWI Institute, Liverpool, New York, USA and **Robert J. Wrona**, TWI Institute, Liverpool, New York, USA

The second edition of the Shingo Prize-winning The TWI Workbook: Essential Skills for Supervisors has been completely updated to the latest terminology and practice, revised forms and tools, and new examples to demonstrate current TWI practice. It features an entirely new section on Job Safety, a fourth TWI module that was developed in Japan using the identical TWI methodology of the original three programs introduced in the original work. A new chapter on TWI Problem Solving is also included.

Productivity Press

Market: Business & Management

December 2015: 8-1/2 x 11: 318pp

Hb: 978-1-138-43808-8: **\$195.00**

Pb: 978-1-498-70396-3: **\$62.95**

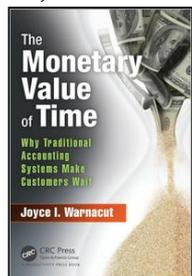
eBook: 978-1-498-70400-7

Prev. Ed Pb: 978-1-563-27315-5

* For full contents and more information, visit: www.crcpress.com/9781498703963

The Monetary Value of Time

Why Traditional Accounting Systems Make Customers Wait



Joyce I. Warnacut, Germanna Community College, Locust Grove, Virginia, USA

Although there are many books on alternative accounting methods, such as Lean accounting, none focus on the impact of time and how accounting practices can be modified to acknowledge the power of time. This book addresses this need. It presents a framework for assessing the value of time in terms of organizational strategy and competitive advantage. The framework presented will enable organizations to develop consistent measures and ensure that their cost accounting system isn't motivating behaviors that add to lead time and make customers wait. The framework outlined in this book is relevant to the managerial and cost accounting practices in

today's manufacturing environment.

Productivity Press

Market: Business Management

January 2016: 6-1/8 x 9-1/4: 170pp

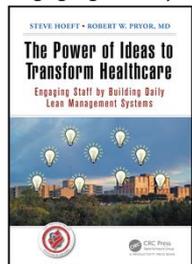
Hb: 978-1-498-73713-5: **\$41.95**

eBook: 978-1-498-73729-6

* For full contents and more information, visit: www.crcpress.com/9781498737135

The Power of Ideas to Transform Healthcare

Engaging Staff by Building Daily Lean Management Systems



Steve Hoefft, Baylor Scott & White Healthcare System, Temple, Texas, USA and **Robert W. Pryor, MD**, Baylor Scott & White Health, Temple, Texas, USA

Many companies conduct Lean training and projects, but few have tapped the wealth of ideas in the minds of their staff like Baylor Scott & White Health. This book documents the path Steve Hoefft and Robert Pryor created at Baylor Scott & White Health and shares what worked as well as what didn't—illustrating over seven years of successes and failures in detail. Providing easy-to-follow guidance for deploying Lean and TPS in healthcare, the book focuses on what must be done and who must do it.

Productivity Press

Market: Healthcare

June 2015: 7 x 10: 422pp

Hb: 978-1-138-43163-8: **\$195.00**

Pb: 978-1-498-70740-4: **\$46.95**

eBook: 978-1-498-70741-1

* For full contents and more information, visit: www.crcpress.com/9781498707404

Biomaterials for Cell Delivery

Vehicles in Regenerative Medicine

Edited by **Aaron S. Goldstein**, Virginia Tech University, Blacksburg, Virginia, USA

Series: *Gene and Cell Therapy*

The purpose of this book is to summarize key strategies and recent accomplishments in the area of developing cell/biomaterial constructs for regenerative medicine. The first section is a review of the state-of-the-art of biomaterial carriers and is divided into synthetic and natural materials. A subset of the latter are decellularized organs which retain the structure and some of the biological activities of the target organ. The bulk of the book is devoted to unique problems associated with key tissue and organ targets.

CRC Press

Market: Materials Science

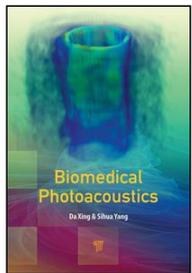
November 2018: 6-1/8 x 9-1/4: 340pp

Hb: 978-1-498-74316-7: **\$179.95**

eBook: 978-1-315-15175-5

* For full contents and more information, visit: www.crcpress.com/9781498743167

Biomedical Photoacoustics



Edited by **Sihua Yang** and **Da Xing**

This book presents the latest developments in this field, especially the advances in the detection of diseases using newly developed PA techniques. Organized in seven chapters, it covers philosophy and technological fundamentals of photoacoustics, key techniques related to fast PA imaging, PA microscopy, PA endoscopy techniques, PA viscoelastic imaging, all-optical non-contact PA imaging technology, and PA imaging's prospects in the medical market.

Pan Stanford

Market: Biomedical Imaging

September 2018: 6 x 9: 300pp

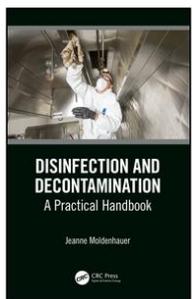
Hb: 978-9-814-77458-1: **\$149.95**

eBook: 978-0-203-70365-6

* For full contents and more information, visit: www.crcpress.com/9789814774581

Disinfection and Decontamination

A Practical Handbook



Edited by **Jeanne Moldenhauer**

This book describes various methods of decontamination and how the methods work. There is a discussion of the various cleaning and disinfection methods utilized, along with details of how to qualify these methods. It also describes new technologies that may be useful in the battle for decontamination across industries. Finally, this book provides a single resource on how one can address contamination issues for a variety of manufacturing processes and industries.

CRC Press

Market: Pharmaceutical Science

December 2018: 6-1/8 x 9-1/4: 248pp

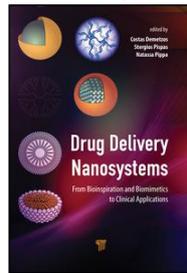
Hb: 978-0-815-37901-0: **\$169.95**

eBook: 978-1-351-21702-6

* For full contents and more information, visit: www.crcpress.com/9780815379010

Drug Delivery Nanosystems

From Bioinspiration and Biomimetics to Clinical Applications



Edited by **Natassa Pippa**, **Costas Demetzos** and **Stergios Pispas**

This multi-authored book presents some recent trends and research achievements in the field of pharmaceutical nanotechnology and advanced drug delivery nanosystems. The applications of drug delivery nanosystems, which are considered carriers of active pharmaceutical ingredients (APIs) (i.e., small molecules, proteins, peptides, and nucleic acids), are analyzed on the basis of technology, preparation protocols, and biomedical applications.

Pan Stanford

Market: Biomedical Engineering

October 2018: 6 x 9: 280pp

Hb: 978-9-814-77492-5: **\$149.95**

eBook: 978-0-429-49054-5

* For full contents and more information, visit: www.crcpress.com/9789814774925

Global Health Impacts of Nanotechnology Law

A Tool for Stakeholder Engagement



Edited by **Ilise L. Feitshans**

This book compiles cutting-edge research in membrane science, nanomaterials, and nanotechnologies, working on membrane design, membrane process engineering, and selected materials and practices for enhanced transport mass, charge, and energy. The topics covered in this book include the design of new nanostructured membranes with improved properties, together with the identification of efficient transport–property relationships. This book shares and strengthens the knowledge of making membrane technology a much more powerful and eco-friendly route.

Pan Stanford

Market: Nanotechnology & Mesoscale Physics

May 2018: 6 x 9: 444pp

Hb: 978-9-814-77484-0: **\$99.95**

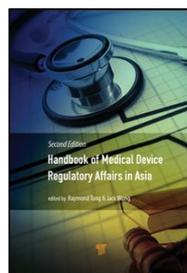
eBook: 978-1-351-13447-7

* For full contents and more information, visit: www.crcpress.com/9789814774840

2nd Edition · NEW EDITION

Handbook of Medical Device Regulatory Affairs in Asia

Second Edition



Edited by **Jack Wong** and **Raymond Tong**

This handbook covers medical device regulatory systems in different countries, ISO standards for medical devices, clinical trial and regulatory requirements, and documentation for application. It is the first to cover the medical device regulatory affairs in Asia. Each chapter provides substantial background materials relevant to the particular area to have a better understanding of regulatory affairs.

Pan Stanford

Market: Biomedical Engineering

April 2018: 6 x 9: 620pp

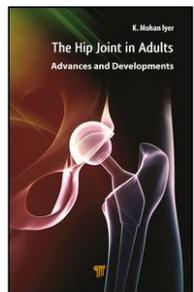
Hb: 978-9-814-77431-4: **\$149.95**

eBook: 978-0-429-50439-6

* For full contents and more information, visit: www.crcpress.com/9789814774314

Hip Joint in Adults

Advances and Developments



Edited by **K. Mohan Iyer**

This book gives details of how surgery of the hip joint has evolved around the world. The 22 original chapters are written by experienced consultants, including Drs. John O'Donnell (Melbourne, Australia), Manfred Krieger and Ilan Elias (Frankfurt, Germany), and Nicholas Goddard (London, U.K.). The book focuses on several important topics such as the direct anterior approach to the hip joint, setup of a total hip in a day, early experiences in outpatient hip surgery, advances in short-stem total hip arthroplasty, hemophilic hip joint arthropathy, mesenchymal stem cell treatment of cartilage lesions in the hip over the next few decades, and minimally invasive surgery of the hip joint.

Pan Stanford

Market: Orthopedics and Trauma

March 2018: 6 x 9: 440pp

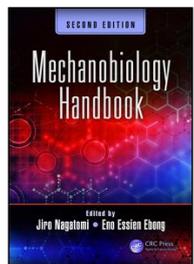
Hb: 978-9-814-77472-7: **\$249.95**

eBook: 978-1-351-26244-6

* For full contents and more information, visit: www.crcpress.com/9789814774727

2nd Edition · NEW EDITION

Mechanobiology Handbook, Second Edition



Edited by **Jiro Nagatomi**, Clemson University, South Carolina, USA and **Eno Essien Ebong**, Northeastern University, Boston, Massachusetts, USA

This is a substantial revision of a former reference work that will now be developed as a primary text for emerging courses in mechanobiology/cell mechanics being offered in a growing number of biomedical engineering and chemical engineering departments worldwide. It will also serve as a professional reference book for engineers, scientists and clinicians who are interested in mechanobiology, which is the study of the effects of mechanical environments on the biological processes of cells. The readers will gain a comprehensive review of recent

research findings as well as elementary chapters on solid mechanics, fluid mechanics, and molecular analysis techniques.

CRC Press

Market: Biomedical Science

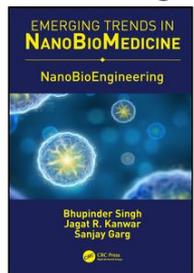
November 2018: 7 x 10: 686pp

Hb: 978-1-498-77946-3: **\$199.95**

eBook: 978-0-429-44498-2

* For full contents and more information, visit: www.crcpress.com/9781498779463

NanoBioEngineering



Edited by **Bhupinder Singh**

The objective of this book is to provide the fundamental comprehension of a broad range of topics in an integrated volume such that readership hailing from diverse disciplines can rapidly acquire the necessary background for applying it in pertinent research and development field. The book volume endeavors to provide vital selective aspects of nanobioengineering, thereby paving the way to develop next generation diagnostics and therapeutics, and thus improving the quality of human life.

CRC Press

Market: Biomedical Science

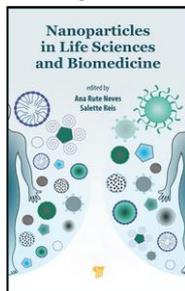
November 2018: 7 x 10: 318pp

Hb: 978-0-815-34835-1: **\$189.95**

eBook: 978-1-351-13890-1

* For full contents and more information, visit: www.crcpress.com/9780815348351

Nanoparticles in Life Sciences and Biomedicine



Edited by **Ana Rute Neves** and **Salette Reis**

This book introduces several principles and the knowledge needed for the audience to understand science at the nanoscale. Unlike other books on the market, this book has an expanded scope in order to reach a wider audience interest in drug nanodelivery topics. The book compiles in great depth current research and recent advances in drug delivery, providing a wide coverage of applications in the nanomedicine field and contributing to improvement of the knowledge of researchers and students. It offers numerous interesting and well-illustrated examples from cancer to infectious diseases, passing through tuberculosis, rheumatoid arthritis, and other important disorders.

Pan Stanford

Market: Biomedical Engineering

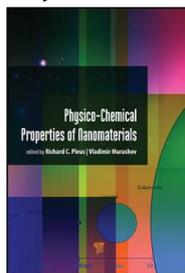
February 2018: 6 x 9: 552pp

Hb: 978-9-814-74598-7: **\$179.95**

eBook: 978-1-351-20735-5

* For full contents and more information, visit: www.crcpress.com/9789814745987

Physico-Chemical Properties of Nanomaterials



Edited by **Richard C. Pleus** and **Vladimir Murashov**

Throughout human history, we have long encountered the combination of promise, risk, and uncertainty that accompanies emerging technologies. Nanotechnology is a recent example of an emerging technology that promises to drastically improve existing products as well as allow for creative development of new goods and services. This book attempts to encompass the state of the science regarding physicochemical characterization of ENMs. It illuminates the effort to understand these properties and how they may be used to ensure safe ENM deployment in existing or future materials and products.

Pan Stanford

Market: Chemistry

June 2018: 6 x 9: 338pp

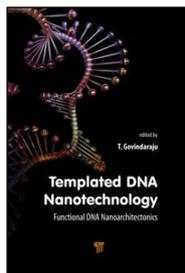
Hb: 978-9-814-77480-2: **\$179.95**

eBook: 978-1-351-16860-1

* For full contents and more information, visit: www.crcpress.com/9789814774802

Templated DNA Nanotechnology

Functional DNA Nanoarchitectonics



Edited by **Thimmaiah Govindaraju**

DNA nanoarchitectonics is the molecular architectonics of small "designer" molecules and short DNA sequences through complementary binding interaction, resulting in well-defined functional nanoarchitectures with realistic applications in areas ranging from biology to materials science. This book covers novel approaches adapted by leading researchers and active practitioners from around the world to create functional nucleic acid molecular systems and nanoarchitectures. Chapters provide fundamental and advanced knowledge and include numerous illustrations, historical perspectives, case studies and practical examples, critical discussions, and future prospects.

Pan Stanford

Market: Materials Science

October 2018: 6 x 9: 400pp

Hb: 978-9-814-80021-1: **\$179.95**

eBook: 978-0-429-42866-1

* For full contents and more information, visit: www.crcpress.com/9789814800211

Whole Body Vibrations

Physical and Biological Effects on the Human Body

Edited by **Redha Taiar**, **Christiano Bittencourt Machado**, Estácio de Sá University, Rio de Janeiro, Brazil, **Xavier Chimentin**, GRESPI, University of Reims Champagne-Ardenne, France and **Mario Bernardo-Filho**, Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brazil

This book offers a comprehensive range of principles, methods, techniques and tools to provide the reader with a clear knowledge of the impact of vibration on the human body. The text considers physical, mechanical and biomechanical aspects and is illustrated by key application domains such as sport and medicine. The first 3 chapters provide useful tools for measuring, generating, simulating and processing vibration signals. The following 6 are "applications" in different fields of expertise, from performance to health with localized or global effects.

CRC Press

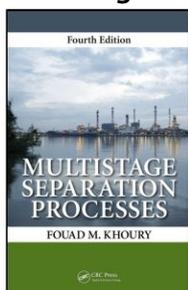
Market: Biomedical Science

November 2018: 6-1/8 x 9-1/4: 288pp

Hb: 978-1-138-50001-3: \$159.95

* For full contents and more information, visit: www.crcpress.com/9781138500013

4th Edition

Multistage Separation Processes

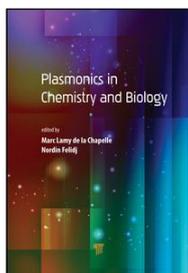
Fouad M. Khoury, University of Houston, Texas, USA

Building on the previous edition's approach, this fourth edition covers the theory, mathematical models, and applications for a comprehensive list of processes. Along with more examples and exercises, this edition revises all chapters, adds several new sections, and includes an entirely new chapter on fluid-solid operations. The book can be used as a textbook for undergraduate and graduate students or as a reference for practicing engineers in the process industry.

CRC Press

Market: Chemical Engineering
 October 2014: 6-1/8 x 9-1/4: 679pp
 Hb: 978-1-482-23054-3: \$225.00
 eBook: 978-1-482-23057-4
 Prev. Ed Hb: 978-0-849-31856-6

* For full contents and more information, visit: www.crcpress.com/9781482230543

Plasmonics in Chemistry and Biology

Edited by Marc Lamy de la Chapelle and Nordin Felidj

Quite recently, it was shown that the activation and the initiation of chemical reactions or physical processes can be facilitated using LSP excitation. Such exploitation presents two main advantages: an enhanced yield and a fine control of chemical reactions at the nanoscale. These topics have become very active and are in line with molecular plasmonics. This book explores this new field and provides a broad view on the exploitation of plasmonics in chemical and biological fields. In particular, it emphasizes that LSP excitation can be employed as a tool to promote and probe specific physical, chemical, or biological effects at the nanoscale.

Pan Stanford

Market: Optics
 October 2018: 6 x 9: 350pp
 Hb: 978-9-814-80003-7: \$149.95
 eBook: 978-0-429-45875-0

* For full contents and more information, visit: www.crcpress.com/9789814800037

4th Edition · TEXTBOOK · READER

Advanced Soil Mechanics

Braja M. Das, formerly at California State University, Sacramento, USA

This new edition of a bestseller includes new sections on the American Association of State Highway and Transportation Officials (AASHTO) soil classification system and soil compaction as well as several recently developed empirical relationships for estimation of maximum dry unit weight based on compaction energy. It covers the procedures to estimate stress and displacement based on the theory of elasticity for plane strain and three-dimensional cases and adds solutions for the determination of vertical stress due to various loading conditions on Westergaard-type material. Several new example problems have been added to every chapter.

CRC Press

Market: Geotechnical Engineering

November 2013: 634pp

Hb: 978-0-415-50665-6: **\$120.00**

eBook: 978-1-482-23483-1

Prev. Ed Hb: 978-1-560-32561-1

* For **full contents** and more information, visit: www.crcpress.com/9780415506656**New Edition Forthcoming in 2019****Blended Learning in Engineering Education**

Recent Developments in Curriculum, Assessment and Practice

Ataur Rahman, University of Western Sydney, Penrith, and **Vojislav Ilic**, University of Western Sydney, Penrith,

Blended Learning combines the conventional face-to-face course delivery with an online component. The synergistic effect of the two modalities has proved to be of superior didactic value to each modality on its own. *Blended Learning in Engineering Education: Recent Developments in Curriculum, Assessment and Practice* highlights current trends in Engineering Education involving face-to-face and online curriculum delivery. This book will be useful to lecturers and postgraduate/undergraduate students as well as university administrators who would like to not only get an up-to-date overview of contemporary developments in this field, but also help enhance academic performance at all levels.

CRC Press

Market: Civil Engineering

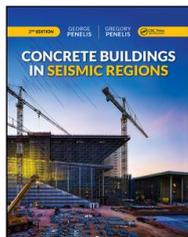
December 2018: 330pp

Hb: 978-1-138-05622-0: **\$129.95**

eBook: 978-1-315-16548-6

* For **full contents** and more information, visit: www.crcpress.com/9781138056220

2nd Edition · NEW EDITION

Concrete Buildings in Seismic Regions, Second Edition

George G. Penelis, Penelis Consulting Engineers SA, Greece and **Gregory G. Penelis**, Penelis Consulting Engineers SA, Greece

This book connects basic earthquake engineering principles with practical structural design. It includes all recent developments of R/C structures and nonlinear analysis, and now introduces seismic isolation and passive devices. It retains coverage of recent developments in structural intervention prior or post-earthquake, and complies with the current European Codes of Practice for the design of R/C buildings in seismic regions.

CRC Press

Market: Earthquake Engineering

October 2018: 7 x 10: 801pp

Hb: 978-1-138-10687-1: **\$195.00**

eBook: 978-1-315-09799-2

Prev. Ed Hb: 978-0-415-53763-6

* For **full contents** and more information, visit: www.crcpress.com/9781138106871**Derelict Mines**

Environmental Risk Assessment and Management

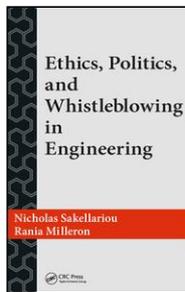
Edited by **Ravi Naidu**, Global Institute for Environmental Research, CRC CARE, University of Newcastle, Callaghan, Australia

Mine areas left behind by companies that no longer exist are defined as derelict mines—those that were operated and closed at a time when most countries did not have adequate regulations requiring rehabilitation of the impacted mine areas. This new book provides unique information on the extent and severity of derelict mines' impact on environmental degradation and human and environmental health. It examines the nature of derelict mines, short- and long-term risks to sensitive receptors, tools for monitoring and prioritizing risks, and technological advances for rehabilitation. This book considers a risk-based approach to managing derelict mines, which is both reliable and cost effective.

CRC Press

Market: Engineering - Environmental

March 2019: 6-1/8 x 9-1/4: 500pp

Hb: 978-1-138-30662-2: **\$189.95*** For **full contents** and more information, visit: www.crcpress.com/9781138306622**Ethics, Politics, and Whistleblowing in Engineering**

Edited by **Nicholas Sakellariou** and **Rania Milleron**, Center for the Study of Responsive Law, Washington, DC, U.S.A

The aim of this book is to generate a strong operational ethic in the work of engineers from all disciplines. It provides numerous examples of engineers who sought to meet the highest ethical standards, risking both professional and personal retaliations. In short, it presents the fields of engineering ethics in the context of actual conflict situations on the job, and points to an urgent need for a strong ethical framework for the profession. This book is about engineering students and practitioners truly understanding, valuing, and championing their wider critical role. Ralph Nader, the consumer advocate and champion of engineers, wrote the preface.

CRC Press

Market: Engineering - General

October 2018: 7 x 10: 224pp

Hb: 978-0-815-37434-3: **\$149.95**Pb: 978-1-138-56265-3: **\$59.95**

eBook: 978-1-351-24241-7

* For **full contents** and more information, visit: www.crcpress.com/9781138562653

TEXTBOOK · READER

Fundamentals of Air Sampling, Second Edition

Ana M. Rule, Johns Hopkins Bloomberg School of Public Health

This second edition will build upon the success of the first, and reflect recent rapid advances in pollution sciences and sampling technologies, especially in automatic online sampling and monitoring. With 13 updated chapters and 8 new chapters, this new edition will include the descriptions and examples of direct-reading instruments; the addition of spectrophotometric methods for measuring gases; a description of principles and techniques for sampling biological aerosols and sub-micron particles; a description of the development of new sensor technology, and greater emphasis on calibration. It also includes end-of-chapter problems and a solutions manual.

CRC Press

Market: Engineering - Environmental

January 2019: 6-1/8 x 9-1/4: 350pp

Hb: 978-1-138-03608-6: **\$139.95*** For **full contents** and more information, visit: www.crcpress.com/9781138036086

2 Volume Set

Geotechnics of Roads 2-Volume Set

Bernardo Caicedo, Universidad de los Andes, Bogotá, Colombia

This work discusses mechanistic approaches to the geotechnics of roads, which are based on the mechanical behavior of materials and on the physical relationships of continuum mechanics. The application of such approaches could allow the development of new technical solutions towards increased sustainability in the use of natural resources. However, their success requires a deep understanding of the behavior of the constituent materials, made possible by recent advances in geotechnical engineering. This book focuses on flexible pavements or unpaved roads, since the behavior of unbound granular materials and soil support is crucial in the performance of those structures.

CRC Press

Market: Civil/Geotechnical Engineering

June 2019: 700pp

Hb: 978-1-138-02956-9: \$289.95

eBook: 978-1-315-22639-2

* For full contents and more information, visit: www.crcpress.com/9781138029569

GIS-Based Simulation and Analysis of Intra-Urban Commuting

Yujie Hu, University of S FI, Tampa and Fahui Wang, Louisiana State University, Baton Rouge, USA

This book presents GIS-based simulation, optimization and statistical approaches to measure, map, analyze, and explain commuting patterns including commuting length and efficiency. It uses Monte Carlo simulation-based methods to measure commuting by simulating individual resident workers, jobs, and trips between them. It examines several longstanding issues that have been central to commuting studies such as the impact of aggregation error on measurement of commuting length and the impact of scale effect on wasteful commuting estimation. Several GIS-automated easy-to-use tools will be available, along with sample data, for readers to download and apply to their own studies.

CRC Press

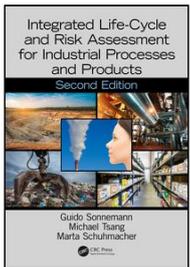
Market: Environmental Science

November 2018: 5-1/2 x 8-1/2: 120pp

Hb: 978-0-367-02303-4: \$70.00

* For full contents and more information, visit: www.crcpress.com/9780367023034

2nd Edition · NEW EDITION

Integrated Life-Cycle and Risk Assessment for Industrial Processes and Products

Edited by Guido Sonnemann, Institute of Molecular Sciences, University of Bordeaux, France, Michael Tsang, Institute of Molecular Sciences, University of Bordeaux, France and Marta Schuhmacher, ETSEQ, Universitat Rovira i Virgili, Tarragona, Spain

Series: Advanced Methods in Resource & Waste Management

The book covers the use of life-cycle assessment, risk assessment, and a combined framework of the two in the evaluation of environmental damages and sustainability constraints. The new edition will take into account new developments in the last 10 years and will extend the scope of the book to cover also products. This broader concept of integration and

complementary use of life cycle and risk assessment will introduce new cases and will discuss them throughout the book. Moreover, it introduces new standards at the international level and provides the latest developments in life cycle impact assessment and environmental risk assessment as important elements of sustainability projects.

CRC Press

Market: Engineering - Environmental

October 2018: 7 x 10: 405pp

Hb: 978-1-498-78069-8: \$199.95

eBook: 978-1-498-78070-4

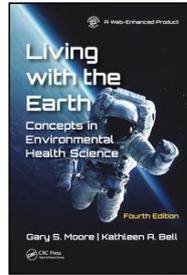
Prev. Ed Hb: 978-1-566-70644-5

* For full contents and more information, visit: www.crcpress.com/9781498780698

4th Edition · TEXTBOOK · READER

Living with the Earth, Fourth Edition

Concepts in Environmental Health Science



Gary S. Moore, Emeritus Prof. University of Massachusetts, MA, U.S.A. and Kathleen A. Bell

This fully-updated new edition incorporates both the common concepts associated with environmental health along with new, emerging, and controversial issues associated with environmental threats to human health. Emphasis is placed on biological, chemical, and physical sources of pollution, and the methods of controlling or limiting those exposures. Careful attention is paid to presenting a balanced view representing opposing scientific views on major issues ranging from "The Greenhouse Effect" to reproductive problems associated with endocrine disruptors. A companion website supplements the material with full-color figures, continuously updated breaking

information, useful links, and more.

CRC Press

Market: Environmental Science

October 2018: 7 x 10: 582pp

Hb: 978-1-138-59056-4: \$119.95

Prev. Ed Hb: 978-0-849-37998-7

* For full contents and more information, visit: www.crcpress.com/9781138590564

**Load Testing of Bridges**

Edited by Eva Lantsoght, Civil Engineering and Geosciences Department, Delft University of Technology, Delft, The Netherlands

Series: Structures and Infrastructures

This edited book deals with the practical aspects, scientific developments, and international views on the topic of load testing of bridges. It provides a background to bridge load testing, and then deals with general practical aspects of load testing, diagnostic and proof load testing of bridges, novel ideas regarding measurement techniques used for load testing, load testing in the framework of reliability-based decision-making and in the framework of a bridge management program. The book concludes with a summary of the knowledge presented in the book, as well as the remaining open questions for research, and provides recommendations for engineers carrying out load tests.

CRC Press

Market: Structural Engineering

March 2019: 700pp

Hb: 978-1-138-09198-6: \$159.95

* For full contents and more information, visit: www.crcpress.com/9781138091986

TEXTBOOK · READER

Mechanics of Mechanisms and Machines

Ilie Talpasanu, Wentworth Institute of Technology, Boston, Massachusetts, USA and Alexandru Talpasanu

Mechanics of Mechanisms and Machines provides a practical approach to machine dynamics and kinematics for undergraduate students and mechanical engineers. It starts by analyzing simple mechanisms, and progresses to more complex examples. It will be the only textbook to cover mechanism design through the use of graphs and generation of independent equations from a matroid form.

CRC Press

Market: Engineering - Mechanical

December 2018: 6-1/8 x 9-1/4: 512pp

Hb: 978-1-498-73547-6: \$149.95

eBook: 978-1-498-73548-3

* For full contents and more information, visit: www.crcpress.com/9781498735476

1 Volume Set • TEXTBOOK • READER

Mining and the Environment

From Ore to Metal



Karlheinz Spitz, Environmental Resources Management, Perth, Australia and **John Trudinger**, Trudinger Consulting, St. Kilda, Australia

Practice-oriented reference book that identifies the wide range of social and environmental issues pertaining to mining. Particular reference is made to mining in developing countries. Gives an extensive overview of issues of concern and illustrates how environmental impact assessment integrates with the mining lifecycle, how negative and positive aspects can be

eliminated, resp. accentuated. Presents practical approaches to manage issues ranging from land acquisition and resettlement of indigenous peoples, through technical aspects of acid rock drainage and mine waste management, to an analysis of sharing benefits with host communities, allowing mining to become a sustainable economic activity. Includes many real-life case studies. Key reading for environmental consultants, students, operators, regulators, and environmental personnel in oil and gas industry; large part of subject matter applies to the extractive industries as a whole.

CRC Press

Market: Mining & Environmental Engineering

November 2008: 900pp

Hb: 978-0-415-46509-0: \$370.00

Pb: 978-0-415-46510-6: \$170.00

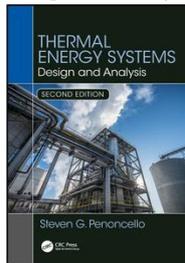
eBook: 978-1-466-57352-9

* For full contents and more information, visit: www.crcpress.com/9780415465090**New Edition Forthcoming 2019**

TEXTBOOK • READER

Thermal Energy Systems

Design and Analysis, Second Edition

**Steven G. Penoncello**, University of Idaho, Moscow, USA

Thermal Energy Systems: Design and Analysis, Second Edition presents basic concepts for simulation and optimization, and introduces simulation and optimization techniques for system modeling. This text addresses engineering economy, optimization, hydraulic systems, energy systems, and system simulation. Computer modeling is presented, and a companion website provides specific coverage of EES and Excel in thermal-fluid design. Assuming prior coursework in basic thermodynamics and fluid mechanics, this fully updated and improved text will guide students in Mechanical and Chemical Engineering as they apply their knowledge to systems analysis

and design, and to capstone design project work.

CRC Press

Market: Engineering - Mechanical

September 2018: 7 x 10: 603pp

Hb: 978-1-138-73589-7: \$169.95

eBook: 978-1-315-18626-9

* For full contents and more information, visit: www.crcpress.com/9781138735897

TEXTBOOK • READER

Sustainability and Design Ethics, Second Edition**Jean Russ**, College of Southern Maryland

Since the first edition, there has been a significant shift across the economy in terms of recognizing the importance of sustainability. This shift is discussed in the second edition through a substantial revision of all the chapters and the addition of a new chapter on business principles, practices, and sustainability. This book unveils a broad understanding of the theories and practices of ethical reasoning- from the general introduction to the more sophisticated theories, followed by the practices of design professionals and organizations that embody these theories, and, the detailed measures and actions to achieve future sustainability.

CRC Press

Market: Environmental Science

November 2018: 6-1/8 x 9-1/4: 180pp

Hb: 978-1-138-39041-6: \$149.95

Pb: 978-1-138-58368-9: \$79.95

* For full contents and more information, visit: www.crcpress.com/9781138390416**Sustainable Engineering**

Principles and Implementation

Catherine Mulligan, Concordia University, Montreal, Quebec, Canada

Due to the constraints on resources and the environment, engineers are faced with new challenges. While it is generally believed that the concepts of sustainable development must be adhered to protect future generations, in practice it is very difficult. Therefore, the focus of this book is to provide both conceptual understanding and practical skills to apply sustainable engineering principles to engineering design. This book provides a comprehensive overview of the interdisciplinary field of sustainability as it applies to engineering. It will describe the tools, protocols and guidelines that are currently available through case studies and examples from around the world.

CRC Press

Market: Environmental Science

February 2019: 6-1/8 x 9-1/4: 240pp

Hb: 978-1-498-77458-1: \$149.95

eBook: 978-1-498-77459-8

* For full contents and more information, visit: www.crcpress.com/9781498774581

Advanced Bifunctional Electrochemical Catalysts for Metal-Air Batteries

Yan-Jie Wang, Dongguan University of Technology, Dongguan, China, Rusheng Yuan, Fuzhou University, Anna Ignaszak, University of New Brunswick, Fredericton, Canada, David P. Wilkinson, Department of Chemical Engineering, University of British Columbia, Vancouver and JiuJun Zhang, Institute for Sustainable Engineering/College of Sciences

Series: *Electrochemical Energy Storage and Conversion*

Metal-air batteries (MABs) have attracted attention because of their high specific energy, low cost, and safety features. The book discusses science and technology including material selection, synthesis, characterization, and their applications in MABs. It comprehensively describes various composite bifunctional electrocatalysts, corrosion/oxidation of carbon-containing air cathode catalysts, and how improvements can be achieved in the catalytic activities of ORR and OER and their durability/stability. This book also analyzes, compares, and discusses composite bifunctional electrocatalysts in the applications of MABs, matching the fast information of commercial MABs in requirements.

CRC Press

Market: Engineering-Chemical
November 2018: 6-1/8 x 9-1/4: 288pp
Hb: 978-0-815-34632-6: \$179.95
eBook: 978-1-351-17072-7

* For full contents and more information, visit: www.crcpress.com/9780815346326

Analytics and Optimization for Renewable Energy Integration

Ning Zhang, Tsinghua University West Main Building 3-206\ Haidian, Beijing, China 100084, Chongqing Kang, Tsinghua University Room 3-204, West Academic Building Beijing, China 100084, Ershun Du, Tsinghua University Room 3-208, West Main Building Beijing, China 100084 and Yi Wang, Tsinghua University Room 3-208, West Academic Building Beijing, China 100084

The scope of this book covers the modeling and forecast of renewable energy and operation and planning of power system with renewable energy integration. The first part presents mathematical theories of stochastic mathematics; the second presents modeling and analytic techniques for renewable energy generation; the third provides solutions on how to handle the uncertainty of renewable energy in power system operation. It includes advanced stochastic unit commitment models to acquire the optimal generation schedule under uncertainty, efficient algorithms to calculate the probabilistic power, and an efficient operation strategy for renewable power plants participating in electricity markets.

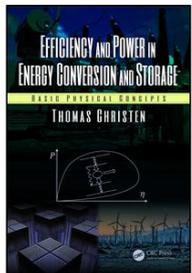
CRC Press

Market: Engineering - Electrical
January 2019: 6-1/8 x 9-1/4: 250pp
Hb: 978-1-138-31682-9: \$129.95
eBook: 978-0-429-45509-4

* For full contents and more information, visit: www.crcpress.com/9781138316829

Efficiency and Power in Energy Conversion and Storage

Basic Physical Concepts



Thomas Christen, ABB Switzerland Ltd., Switzerland

This textbook provides the fundamental theoretical concepts of how to describe and optimize devices for energy conversion and storage. Focusing on power-efficiency relations which are the main ingredient for optimization, relations will be derived and discussed for various prototype systems like batteries, electro-motors, heat engines, solar, photodiodes, piezo-electrics, wind turbines etc. In contrast to other books, all models will be constrained to the simplest basics, allowing non-experts and beginners to easily grasp the essentials.

CRC Press

Market: Engineering Electrical
October 2018: 6-1/8 x 9-1/4: 168pp
Hb: 978-1-138-62663-8: \$159.95
eBook: 978-0-429-45428-8

* For full contents and more information, visit: www.crcpress.com/9781138626638

Electronics and Communication Engineering: Applications and Innovations



Edited by T. Kishore Kumar, Ravi Kumar Jatoth and V. V. Mani

This volume addresses a selection of important current advancements in the electronics and communication engineering fields, focusing signal processing, chip design and networking technology. Specifically, the volume looks at new research and trends in microwave and antennas communication systems, very-large-scale integration, embedded systems, and intelligent control and signal processing systems.

Apple Academic Press

Market: Analog Communications
November 2018: 6 x 9: 355pp
Hb: 978-1-771-88693-2: \$159.95
eBook: 978-1-351-13682-2

* For full contents and more information, visit: www.crcpress.com/9781771886932

Emerging Internet-Based Technologies

Matthew N. O. Sadiku, Prairie View A&M University, Texas, USA

The author of this book has identified the seven key emerging Internet-related technologies: Internet of things, smart everything, big data, cloud computing, cybersecurity, software-defined networking, and online education. Together these technologies are transformational and disruptive. This book provides researchers, students, and professionals a comprehensive introduction, applications, benefits, and challenges for each technology. It presents the impact of these cutting-edge technologies on our global economy and its future. The word "technology" refers to "collection of techniques, skills, methods, and processes used in the production of goods or services."

CRC Press

Market: Engineering - Electrical
January 2019: 6-1/8 x 9-1/4: 136pp
Hb: 978-0-367-03029-2: \$79.95
eBook: 978-0-429-02024-7

* For full contents and more information, visit: www.crcpress.com/9780367030292

Low Power Circuits for Emerging Applications in Communications, Computing, and Sensing

Edited by Krzysztof Iniewski, Emerging Technologies CMOS Inc., British Columbia, Canada and Fei Yuan, Ryerson University, Toronto, Ontario, Canada

Series: *Devices, Circuits, and Systems*

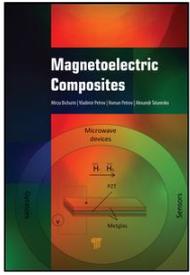
The book addresses the need to investigate new approaches to lower energy requirement in multiple application areas and serves as a guide into emerging circuit technologies. It explores revolutionary device concepts, sensors, and associated circuits and architectures that will greatly extend the practical engineering limits of energy-efficient computation. The book responds to the need to develop disruptive new system architectures, circuit microarchitectures, and attendant device and interconnect technology aimed at achieving the highest level of computational energy efficiency for general purpose computing systems.

CRC Press

Market: Engineering - Electrical
December 2018: 6-1/8 x 9-1/4: 152pp
Hb: 978-1-138-58001-5: \$139.95
eBook: 978-0-429-50756-4

* For full contents and more information, visit: www.crcpress.com/9781138580015

Magnetolectric Composites



Mirza I. Bichurin

The book presents the authors' many years of experience, gained while studying ME composites and creating device models based on their studies. It describes low-frequency ME devices, such as current and position sensors and energy harvesters, and microwave ME devices, such as antennas, attenuators, filters, gyrators, and phase shifters. Currently, a huge literature is available on theoretical and experimental studies of ME composites but much less on the development and research of instruments based on them. It is important to note that so far only investigation of ME magnetic field sensors has been cited in the existing literature.

Pan Stanford

Market: Materials Science

November 2018: 6 x 9: 350pp

Hb: 978-9-814-80004-4: **\$149.95**

eBook: 978-0-429-48867-2

* For full contents and more information, visit: www.crcpress.com/9789814800044

Multi-Stage Actuation Systems and Control

Chunling Du, Data Storage Institute, Singapore and Chee Kiang Pang, Singapore Institute of Technology, Singapore

The book aims at empowering readers with a clear understanding of multi-stage mechanism, different microactuators' performances, their limitations to control system performance and problems encountered in control system design and techniques for solving these problems and dealing with these limitations. This book is designed for academic researchers and engineering practitioners in systems and control, especially those engaged in the area of control in mechanical systems with microactuators and multi-stage actuations.

CRC Press

Market: Engineering - Electrical

December 2018: 6-1/8 x 9-1/4: 216pp

Hb: 978-1-138-48075-9: **\$129.95**

eBook: 978-1-351-06218-3

* For full contents and more information, visit: www.crcpress.com/9781138480759

Observability and Controllability of General Linear Systems

Lyubomir T. Gruyitch, University of Technology of Belfort-Montbéliard, France (Retired)

The book begins with the definition of time together with a brief description of its crucial properties and with the principles of the physical uniqueness and continuity of physical variables, which are essential for the natural tracking control synthesis. The book presents further new results on matrices, on polynomial matrices, on matrix polynomials and on the new compact, simple and elegant calculus that enabled the generalization of the transfer function matrix concept and of the state concept, the proofs of the new observability, controllability, trackability and tracking conditions, as well as the natural tracking control synthesis for all five classes of the treated linear systems.

CRC Press

Market: Engineering - Electrical

October 2018: 6-1/8 x 9-1/4: 335pp

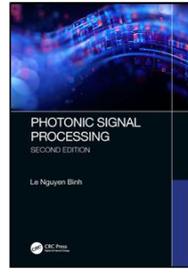
Hb: 978-1-138-35315-2: **\$139.95**

eBook: 978-0-429-43228-6

* For full contents and more information, visit: www.crcpress.com/9781138353152

2nd Edition · NEW EDITION

Photonic Signal Processing, Second Edition



Le Nguyen Binh, Huawei Technologies Co., Ltd., European Research Center, Munich, Germany

Series: Optical Science and Engineering

This book discusses the techniques of processing and manipulating signals propagating in the optical domain. Photonic components essential for photonic processing systems are included as well as the representation of photonic circuits. Photonic signal processors and their applications for the generation of solitons, and the application of these solitons in optically amplified fiber transmission systems, are discussed. Compensation dispersion using a photonic processor, the design of optical filters using photonic processor techniques, and the

filtering of microwave signals in the optical domain are illustrated. This new edition will be fully revised and include four new chapters.

CRC Press

Market: Engineering - Electrical

December 2018: 7 x 10: 520pp

Hb: 978-1-498-76993-8: **\$189.95**

eBook: 978-0-429-43699-4

Prev. Ed Hb: 978-0-849-33762-8

* For full contents and more information, visit: www.crcpress.com/9781498769938

Substrate, Interconnects, Noise Immunity, and Electro-Thermal Analysis in Bulk Silicon Technology for Three-Dimensional Circuits

Yue Ma, INSA and Christian Gontrand, INSA

As demand for on-chip functionalities and requirements for low power operation continue to increase as a result of the emergence in mobile, wearable and internet-of-things (IoT) products, 3D/2.5D have been identified as an inevitable path moving forward. As circuits become more and more complex, especially three-dimensional ones, new insights have to be developed in many domains, including electrical, thermal, noise, interconnects, and parasites. It is the entanglement of such domains that begins the very key challenge as we enter in 3D nano-electronics. This book aims to develop this new paradigm, going to a synthesis beginning between many technical aspects.

CRC Press

Market: Engineering - Electrical

April 2019: 6-1/8 x 9-1/4: 220pp

Hb: 978-0-367-02343-0: **\$139.95**

eBook: 978-0-429-39961-9

* For full contents and more information, visit: www.crcpress.com/9780367023430

Technologies to Counter Unmanned Aircraft Systems

Edited by Eric Matson

Series: Signal and Image Processing of Earth Observations

The U.S. military is employing technologies that can effectively detect, track, ID, and neutralize adversarial UAVs that could be used for surveillance or attacks. The FAA is testing systems that neutralize UAVs in restricted airspace to avoid collision with commercial aircraft. For all those working with counter UAV systems this book presents fundamentals and discusses practical designs considerations for unimodal and multimodal approaches. It provides readers in a single volume with technologies and threats overview to detailed description of technologies used including acoustics, EOIR, radar, passive RF, and kinetic and nonkinetic defeat techniques.

CRC Press

Market: Engineering - Mechanical

March 2019: 6-1/8 x 9-1/4: 450pp

Hb: 978-1-138-30748-3: **\$179.95**

* For full contents and more information, visit: www.crcpress.com/9781138307483

The GETMe Mesh Smoothing Framework

A Geometric Way to Quality Finite Element Meshes

Dimitris P. Vartziotis, NIKI Digital Engineering, Greece; TWT GmbH Science and Innovation, Germany and Joachim Wipper

This book describes the mathematical theory of regularizing element transformations as foundation for mesh smoothing. It gives a thorough introduction to GETMe based mesh smoothing and its algorithms providing a framework to focus on efficiently improving minimal element quality, overall mesh quality, and mesh validity. It addresses the improvement of various types of meshes like planar, surface, volumetric, mixed, isotropic or anisotropic meshes and addresses aspects of combining mesh smoothing with topological mesh modifications.

CRC Press

Market: Engineering - Electrical
December 2018: 6-1/8 x 9-1/4: 272pp
Hb: 978-0-367-02342-3: \$129.95
eBook: 978-0-429-39962-6

* For full contents and more information, visit: www.crcpress.com/9780367023423

X-Ray Diffraction Imaging

Technology and Applications

Edited by Joel Greenberg, Duke University, Durham, North Carolina, USA and Krzysztof Iniewski, Emerging Technologies CMOS Inc., British Columbia, Canada

Series: Devices, Circuits, and Systems

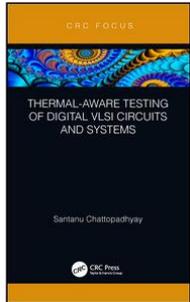
The ability to perform spatially-resolved material discrimination significantly enhances the performance of medical and industrial radiography, as well as contraband and explosives detection systems. Coherent scatter imaging has been the most promising approach because of its capacity to provide material-specific signatures in optically thick materials. Coherent scattering mechanism forms a basis of the x-ray diffraction imaging that is a subject of this book. The x-ray diffraction technology and its various applications in medical, industrial and security fields are also covered.

CRC Press

Market: Engineering - Electrical
November 2018: 6-1/8 x 9-1/4: 256pp
Hb: 978-1-498-78361-3: \$149.95
eBook: 978-1-498-78362-0

* For full contents and more information, visit: www.crcpress.com/9781498783613

Thermal-Aware Testing of Digital VLSI Circuits and Systems



Santanu Chattopadhyay, Department of Electronics and Electrical Communication Engineering, Indian Institute of Technology Kharagpur, West Bengal, India

This book aims to highlight the research activities in the domain of thermal-aware testing. Thermal-aware testing can be employed both at circuit level and at system level. This book will be suitable for researchers working on power- and thermal-aware design and the testing of digital VLSI chips.

CRC Press

Market: Electrical Engineering
April 2018: 5-1/2 x 8-1/2: 118pp
Hb: 978-0-815-37882-2: \$70.00
eBook: 978-1-351-22778-0

* For full contents and more information, visit: www.crcpress.com/9780815378822

Trackability and Tracking of General Linear Systems

Lyubomir T. Gruyitch, University of Technology of Belfort-Montbéliard, France (Retired)

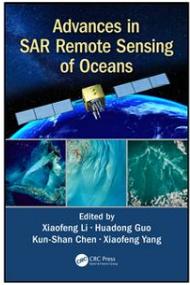
The book begins with the definition of time together with a brief description of its crucial properties and with the principles of the physical uniqueness and continuity of physical variables, which are essential for the natural tracking control synthesis. The book presents further new results on matrices, on polynomial matrices, on matrix polynomials and on the new compact, simple and elegant calculus that enabled the generalization of the transfer function matrix concept and of the state concept, the proofs of the new observability, controllability, trackability and tracking conditions, as well as the natural tracking control synthesis for all five classes of the treated linear systems.

CRC Press

Market: Engineering - Electrical
October 2018: 6-1/8 x 9-1/4: 380pp
Hb: 978-1-138-35337-4: \$139.95
eBook: 978-0-429-43214-9

* For full contents and more information, visit: www.crcpress.com/9781138353374

Advances in SAR Remote Sensing of Oceans



Edited by **Xiaofeng Li**, Huadong Guo, Institute of Remote Sensing and Digital Earth, Chinese Academy of Science, **Kun-Shan Chen**, Chinese Academy of Sciences, Beijing, China and **Xiaofeng Yang**, NOAA/NESDIS, USA

SAR remote sensing for ocean and coast monitoring has become a very popular area of geoscience and remote sensing research in recent years. This book is focused on ocean dynamical studies of sea surface phenomena, air-sea interactions, anthropogenic object detection and radar imaging mechanisms. The objective is to demonstrate the types of information that may be obtained from SAR images of the ocean, and the cutting-edge methods of analyzing the imagery. It is intended for scientific researchers as well as graduate and/or senior undergraduate students who

wish to use remotely sensed radar data in oceanographic research.

CRC Press

Market: Environmental Science
October 2018: 6-1/8 x 9-1/4: 340pp
Hb: 978-0-815-37677-4: **\$189.95**
eBook: 978-1-351-23582-2

* For full contents and more information, visit: www.crcpress.com/9780815376774

Archaeological Remote Sensing

Christopher J. Brooke, University of Nottingham, UK and **Daniel N.M. Donoghue**, University of Durham, UK

Archaeological data recovery and analysis can very usefully be performed by remote sensing. These methods are powerful and relatively inexpensive. This is the sole book that presents current techniques and research in these methods in a way useful for students of remote sensing, geography, and archaeology. Technical aspects of remote sensing are covered in general, and the text concentrates on applications and results. It surveys the development of archaeological remote sensing from early aerial photography through to high-resolution satellite imagery, and then details the various methods currently available, extensively illustrated with examples of practical applications as case studies.

CRC Press

Market: GIS and Remote Sensing
February 2019: 6-1/8 x 9-1/4: 312pp
Hb: 978-0-415-30690-4: **\$189.95**
eBook: 978-0-203-51611-9

* For full contents and more information, visit: www.crcpress.com/9780415306904

3rd Edition · NEW EDITION

Assessing the Accuracy of Remotely Sensed Data

Principles and Practices, Third Edition

Russell G. Congalton, University of New Hampshire University of New Hampshire, Durham, USA and **Kass Green**, Consultant, Berkeley, California, USA

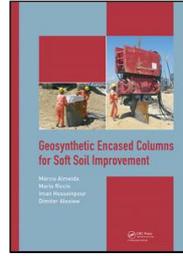
The field of assessing the accuracy of maps derived from remotely sensed data has continued to develop and mature since the first edition of this book in 1999. The third edition will have all chapters reviewed and updated with any new information available today. It will include a redo of spatial accuracy chapter to update for new ASPRS standards and better explain the issue with RMSE. Another new chapter on AA sampling for objects vs pixels will be included; an object-based case study and more information on proportional sampling. Finally, an entire new chapter on collection of reference data for general use and sharing in the public domain will complete the third edition.

CRC Press

Market: Environmental Science
January 2019: 6-1/8 x 9-1/4: 272pp
Hb: 978-1-498-77666-0: **\$149.95**
eBook: 978-1-498-77668-4
Prev. Ed Hb: 978-1-420-05512-2

* For full contents and more information, visit: www.crcpress.com/9781498776660

Geosynthetic Encased Columns for Soft Soil Improvement



Márcio Almeida, Graduate School of Engineering (COPPE), Federal University of Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil, **Mario Riccio**, School of Engineering, Federal University of Juiz de Fora, Juiz de Fora, Brazil, **Iman Hosseinpour**, Department of Civil Engineering, University of Guilan, Rasht, Iran and **Dimiter Alexiew**, Independent Geosynthetics & Geotechnical Consultant, Germany

This book deals with "geosynthetic encased columns", a relatively new technique used for the ground improvement of soft soils. The GEC construction technique has thus far been used mainly in Europe, and is well supported by a number of calculation methods and is a suitable substitute for the more traditional stone columns technique which has a less satisfactory performance when applied to very soft soils. The book discusses the calculations methods used for design of GEC, with the aids of pre-design charts and well-documented case histories, showing field response of embankments supported by soft soils improved with GEC.

CRC Press

Market: Civil Engineering
November 2018: 138pp
Hb: 978-1-138-03878-3: **\$149.95**
eBook: 978-1-315-17714-4

* For full contents and more information, visit: www.crcpress.com/9781138038783

3rd Edition · TEXTBOOK · READER

GIS

A Computing Perspective, Third Edition

Michael F. Worboys, University of Maine, Orono, USA, **Matt Duckham**, University of Melbourne, Victoria, Australia and **Alexander Klippel**, The Penn State University, USA

Following two successful editions, the third edition of GIS: A Computer Perspective has been completely revised and incorporates new chapters. Now included are updates of ontologies, developments in decentralized computing, Volunteered Geographic Information (VGI), and Knowledge Discovery in Databases (KDD). The authors have also expanded this edition to include a more thorough treatment of geovisualization and spatial cognition.

CRC Press

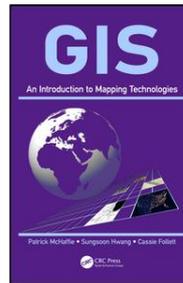
Market: Environmental Science
March 2019: 7 x 10: 530pp
Hb: 978-1-466-58719-9: **\$129.95**
eBook: 978-1-466-58720-5
Prev. Ed Hb: 978-0-415-28375-5

* For full contents and more information, visit: www.crcpress.com/9781466587199

TEXTBOOK · READER

GIS

An Introduction to Mapping Technologies



Patrick McHaffie, DePaul University, Chicago, **Sungsoon Hwang**, Department of Geography, DePaul University and **Cassie Follett**, DePaul University, Chicago

The purpose of this textbook is to provide an accessible introduction to geotechnology for a wide range of students. The techniques and approaches to problem solving, project organization and management, and data visualization are used with the intention of introducing students to the possibility of using GIS as a platform for making contributions to a wide range of programs that are concerned with social, economic, political, and environmental change. Includes activities that lead students through hands-on workflows to create flexible and functional "solutions" to specific tasks that are typical for geospatial analysts.

CRC Press

Market: Environmental Science
October 2018: 6-1/8 x 9-1/4: 348pp
Hb: 978-1-498-74023-4: **\$99.95**
eBook: 978-1-498-74024-1

* For full contents and more information, visit: www.crcpress.com/9781498740234

Imaging from Spaceborne and Airborne SARs, Calibration, and Applications

Masanobu Shimada

Series: SAR Remote Sensing

Synthetic Aperture Radar is a topic of great interest all over the world. SAR remote sensing is being used for Earth observation, geophysical applications and environmental monitoring. This book covers SAR theory, SAR data processing, and SAR applications using ALOS/PALSAR data. Particularly of interest are topics such as calibration, interferometry and SAR imaging of forested regions, disaster monitoring and the effects of climate change. It explains in detail the JAXA SAR products; large scale SAR imaging and SAR mosaicking. This book is the result of the authors' 30 year experience in SAR imaging.

CRC Press

Market: Environmental Science

November 2018: 7 x 10: 390pp

Hb: 978-1-138-19705-3: **\$189.95**

eBook: 978-1-315-28261-9

* For full contents and more information, visit: www.crcpress.com/9781138197053

Carbon Nanomaterials in Biomedicine and the Environment

Edited by **Zulkhair Mansurov**

The creation of nanostructured carbon-containing materials is a rapidly developing research field and forms the theme of this book. Carbon nanomaterials possess special physical and chemical properties: as adsorbents, they are widely used for the purification of water and other liquids, the recovery of valuable substances such as petrochemicals and wine, and in medicine for the purification of blood and other physiological fluids. The book focuses on recent developments in the synthesis of nanostructured carbon multifunctional sorbents and will be useful for scientists, chemical industry specialists, professors, and Masters/PhD students of chemical, physical and biological sciences.

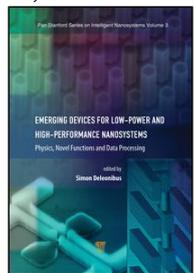
Pan Stanford

Market: Nanobiotechnology
December 2018: 6 x 9: 300pp
Hb: 978-9-814-80027-3: \$149.95
eBook: 978-0-429-42864-7

* For full contents and more information, visit: www.crcpress.com/9789814800273

Emerging Devices for Low-Power and High-Performance Nanosystems

Physics, Novel Functions, and Data Processing



Edited by **Simon Deleonibus**

Series: Pan Stanford Series on Intelligent Nanosystems

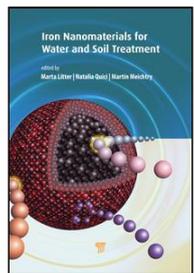
The history of information and communications technologies (ICT) has been paved by both evolutive paths and challenging alternatives, so-called emerging devices and architectures. Their introduction poses the issues of state variable definition, information processing, and process integration in 2D, above IC, and in 3D. This book reviews the capabilities of integrated nanosystems to match low power and high performance either by hybrid and heterogeneous CMOS in 2D/3D or by emerging devices for alternative sensing, actuating, data storage, and processing

Pan Stanford

Market: Nanotechnology
September 2018: 6 x 9: 450pp
Hb: 978-9-814-80011-2: \$179.95
eBook: 978-0-429-45873-6

* For full contents and more information, visit: www.crcpress.com/9789814800112

Iron Nanomaterials for Water and Soil Treatment



Edited by **Marta I. Litter, Natalia Quici and Martin Meichtry**

This book focuses on the preparation of iron nanomaterials that can carry out removal processes and the use of these nanoparticles for cleaning waters and soils. It carefully explains the different aspects of the synthesis and characterization of iron nanoparticles and methods to evaluate their ability to remove contaminants, along with practical deployment. It overviews the advantages and disadvantages of using iron-based nanomaterials and presents a vision for the future of this nanotechnology.

Pan Stanford

Market: Environmental
May 2018: 6 x 9: 324pp
Hb: 978-9-814-77467-3: \$149.95
eBook: 978-0-203-70292-5

* For full contents and more information, visit: www.crcpress.com/9789814774673

Nanobrain

Making an Intelligent Molecular Machine

Edited by **Anirban Bandyopadhyay**, National Institute for Materials Science, Ibaraki, Japan

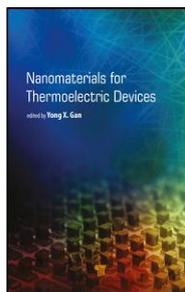
This reference explores recent efforts to realize a practical physical device that follows the neural network principles of the brain, incorporating research from the last 50 years in nanotechnology, artificial intelligence, supramolecular chemistry, and materials science. The author adopts a multidisciplinary approach, addressing fundamental problems in computer science, organic synthesis, theoretical physics, supramolecular chemistry, and artificial intelligence in a lucid, accessible way and references major breakthrough papers that have changed the course of scientific development. A color insert is included, as well as a CD with additional material.

CRC Press

Market: Nanoscience
March 2019: 6-1/8 x 9-1/4: 304pp
Pb: 978-1-439-87549-0: \$149.95
eBook: 978-1-439-87551-3

* For full contents and more information, visit: www.crcpress.com/9781439875490

Nanomaterials for Thermoelectric Devices



Edited by **Yong X. Gan**

With the increased demand for energy, we are facing the grand challenge of energy sustainability. Renewable energy has attracted great interest as a solution to this problem. Among the various renewable energy sources available, solar energy and waste heat energy harvesting has significant advantages over others due to availability. A high energy conversion efficiency is critical for practical applications of thermoelectric energy conversion systems. Understanding the fundamentals of energy conversion mechanisms is essential. This book introduces thermoelectric energy conversion nanomaterials, the latest research progress in them, and related manufacturing processes.

Pan Stanford

Market: Materials Science
August 2018: 6 x 9: 248pp
Hb: 978-9-814-77498-7: \$149.95
eBook: 978-0-429-48872-6

* For full contents and more information, visit: www.crcpress.com/9789814774987

Nanomaterials in Architecture and Art Conservation

Edited by **Gerald Ziegenbalg, Milos Drdacky, Claudia Dietze and Dirk Schuch**

Nanomaterials in Architecture and Art Conservation gives a comprehensive overview of the state of the art of using nanomaterials in conservation sciences, mainly for stone, mortar, and plaster strengthening, but also for the consolidation of wall paintings.

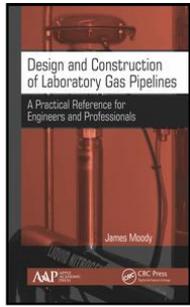
Pan Stanford

Market: Materials Science
December 2018: 6 x 9: 500pp
Hb: 978-9-814-80026-6: \$179.95
eBook: 978-0-429-42875-3

* For full contents and more information, visit: www.crcpress.com/9789814800266

Design and Construction of Laboratory Gas Pipelines

A Practical Reference for Engineers and Professionals



James Moody

This new volume, *Design and Construction of Laboratory Gas Pipelines: A Practical Reference for Engineers and Professionals*, focuses on design and installation of laboratory gas pipelines. It instructs design engineers, laboratory managers, and installation technicians on how to source the information and specifications they require for the design and installation of laboratory gas systems suitable for their intended use.

Apple Academic Press

Market: Mechanical Engineering
December 2018: 6-1/8 x 9-1/4: 332pp
Hb: 978-1-771-88723-6: **\$169.95**
eBook: 978-0-429-46973-2

* For full contents and more information, visit: www.crcpress.com/9781771887236

Mechanics of Project Management

Nuts and Bolts of Project Execution



Adedeji B. Badiru, Air Force Institute of Technology, Dayton, Ohio, USA, **S. Abidemi Badiru** and **I. Adetokunboh Badiru**
Series: Systems Innovation Book Series

Every organizational endeavor is based on project management. Projects range from simple to complex, with a definite beginning and a definite end. In manufacturing operations, the production of each unit of a product is defined as a project. The lifecycle goes from raw material to the product delivery stage, with steps in between managed as a rigorous project. This book covers the mechanics of project management and offers the requirements for executing a project using a systems-engineering framework and the project management body of knowledge, as advocated by the Project Management Institute. It includes the nuts and bolts for untangling the knots that often exist in project

execution.

CRC Press

Market: Engineering - Industrial & Manufacturing
November 2018: 5-1/2 x 8-1/2: 168pp
Hb: 978-1-138-34882-0: **\$70.00**
eBook: 978-0-429-43652-9

* For full contents and more information, visit: www.crcpress.com/9781138348820

Software-Defined Networking and Security

From Theory to Practice

Dijiang Huang, Arizona State University, Tempe, USA, **Ankur Chowdhary**, Arizona State University and **Sandeep Pisharody**, Arizona State University

Series: Data-Enabled Engineering

This book seeks to educate the reader regarding Cyber Maneuver or Adaptive Cyber Defense. Before implementing proactive cyber defense techniques, or Moving Target Defense schemes, it's important to analyze the threats, detect attacks, and implement countermeasures, while still preserving user experience. This book discusses how to detect multi-stage attack. It presents a comparative study of methods and solutions. It covers modern computing paradigms such as Software-Defined Networks and Network Functions Virtualization (SDN-NFV), and their effectiveness in implementing Moving Target Defense responses. Source codes, online labs, and exercises are available at the author's university website.

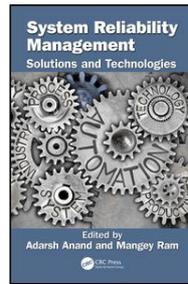
CRC Press

Market: Engineering - Industrial & Manufacturing
December 2018: 6-1/8 x 9-1/4: 355pp
Hb: 978-0-815-38114-3: **\$129.95**
eBook: 978-1-351-21076-8

* For full contents and more information, visit: www.crcpress.com/9780815381143

System Reliability Management

Solutions and Technologies



Edited by **Adarsh Anand**, University of Delhi and **Mangey Ram**, Department of Mathematics, Graphic Era University, Dehradun, Uttarakhand, India

Series: Advanced Research in Reliability and System Assurance Engineering

This book provides a floor for researchers, industries, managers, and government policy makers to cooperate and collaborate and to improve the reliability prediction, business process, streamline production and maintenance procedures, and comprehend all the enterprise operations, maintenance, reliability and engineering so as to manage their resources and improve its utilization for the benefit of society with organizational goals. The book fits in well as an important and growing need among reliability centers and industrial assets to provide interdisciplinary solutions to complex problems through a research based system of systems approach to optimize cost, performance, and safety.

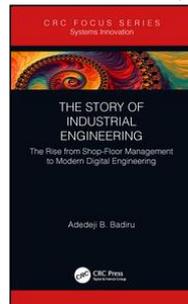
CRC Press

Market: Engineering - Industrial & Manufacturing
October 2018: 6-1/8 x 9-1/4: 260pp
Hb: 978-0-815-36072-8: **\$189.95**
eBook: 978-1-351-11766-1

* For full contents and more information, visit: www.crcpress.com/9780815360728

The Story of Industrial Engineering

The Rise from Shop-Floor Management to Modern Digital Engineering



Adedeji B. Badiru, Air Force Institute of Technology, Dayton, Ohio, USA

Series: Systems Innovation Book Series

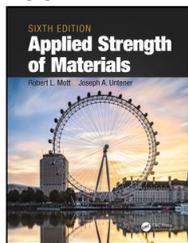
Industrial Engineering is the profession dedicated to making systems function better together with less waste, better quality, and fewer resources, to serve the needs of society more efficiently and more effectively. This book uses a story-telling approach to teach and elaborate the fundamental principles of industrial engineering in a simple, interesting, and engaging format. It will incite interest in industrial engineering through applicable narratives of how the tools and techniques of the discipline apply to a broad spectrum of applications in business, industry, and engineering.

CRC Press

Market: Engineering - Industrial & Manufacturing
November 2018: 5-1/2 x 8-1/2: 168pp
Hb: 978-1-138-61674-5: **\$70.00**
eBook: 978-0-429-46181-1

* For full contents and more information, visit: www.crcpress.com/9781138616745

6th Edition · TEXTBOOK

Applied Strength of Materials

Robert Mott, University of Dayton, Ohio, USA and Joseph A. Untener, University of Dayton, Ohio, USA

This edition provides comprehensive coverage of the key topics in strength of materials for students in engineering technology. Its emphasis is on applications, problem solving and design of structural members, mechanical devices and systems. This well-known book has been enhanced to include coverage of the latest tools, trends and techniques and to make even greater use of example problems. A full complement of resources are offered, including a solutions manual, PowerPoint slides, figure slides of book illustrations and extra problems.

CRC Press

Market: Engineering - Mechanical

September 2016: 8 x 10: 834pp

Hb: 978-1-498-71675-8: **\$170.00**

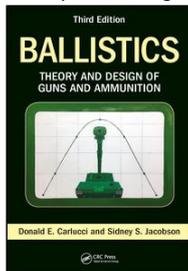
eBook: 978-1-498-71678-9

* For full contents and more information, visit: www.crcpress.com/9781498716758

3rd Edition

Ballistics

Theory and Design of Guns and Ammunition, Third Edition



Donald E. Carlucci, U.S. Army, Picatinny Arsenal, Rockaway Township, New Jersey, USA and Sidney S. Jacobson, Retired, Chester, New Jersey, USA

With new chapters, homework problems, case studies, figures, and examples, Ballistics: Theory and Design of Guns and Ammunition, Third Edition encourages superior design and innovative applications in the field of ballistics. It examines the analytical and computational tools for predicting a weapon's behavior in terms of pressure, stress, and velocity, demonstrating their applications in ammunition and weapons design. New coverage in the Third Edition includes gas-powered guns, and naval ordinance. With its thorough coverage of interior, exterior and terminal ballistics, this new edition continues to be the

standard resource for those studying the technology of guns and ammunition.

CRC Press

Market: Engineering - Mechanical

March 2018: 7 x 10: 642pp

Hb: 978-1-138-05531-5: **\$189.95**

eBook: 978-1-315-16596-7

* For full contents and more information, visit: www.crcpress.com/9781138055315

2nd Edition · TEXTBOOK · READER

Biochemical Engineering

Douglas S. Clark, University of California, Berkeley and Harvey W. Blanch, University of California, Berkeley

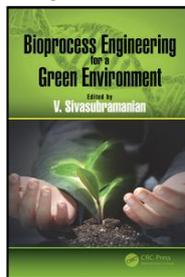
This work provides comprehensive coverage of modern biochemical engineering, detailing the basic concepts underlying the behaviour of bioprocesses as well as advances in bioprocess and biochemical engineering science. It includes discussions of topics such as enzyme kinetics and biocatalysis, microbial growth and product formation, bioreactor design, transport in bioreactors, bioproduct recovery and bioprocess economics and design. A solutions manual is available to instructors only.

CRC Press

February 1997: 7 x 9: 716pp

Pb: 978-0-824-70099-7: **\$96.95**

eBook: 978-0-585-15741-2

* For full contents and more information, visit: www.crcpress.com/9780824700997**Bioprocess Engineering for a Green Environment**

Edited by V. Sivasubramanian, NIT Calicut, Kerala, India

This book deals with bioprocess engineering, which encompasses the design and development of equipment and processes for the manufacturing of products such as food, pharmaceuticals, chemicals, polymers and paper from biological materials. It also deals with studying various biotechnological processes used in industries for large scale production of biological products, for the optimization of yield. This work also incorporates significant treatment on biocatalysts and their applications in food industry, bioplastics production, conversion of agro waste and the importance of biotechnology in bioprocessing. This is coupled with pertinent information related to environmental contaminants.

CRC Press

Market: Engineering - Chemical

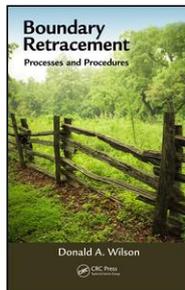
May 2018: 6-1/8 x 9-1/4: 426pp

Hb: 978-1-138-03597-3: **\$179.95**

eBook: 978-1-315-23237-9

* For full contents and more information, visit: www.crcpress.com/9781138035973**Boundary Retracement**

Processes and Procedures



Donald A. Wilson

The survey and the transference are the distinctive and operative acts in the transmission of real property and, where they differ from each other, one must of necessity control the other. This book addresses the aforementioned concepts by external explanations in order to understand the discrepancies between them. It also helps to avoid expensive and wasteful litigation over boundaries that were previously not in conflict. The text offers an extensive review of the law for boundary retracement and cites numerous case examples.

CRC Press

Market: Environmental Science

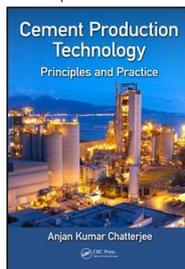
February 2017: 6-1/8 x 9-1/4: 474pp

Hb: 978-1-498-72710-5: **\$160.00**

eBook: 978-1-315-16048-1

* For full contents and more information, visit: www.crcpress.com/9781498727105**Cement Production Technology**

Principles and Practice



Anjan Kumar Chatterjee, Former Wholtime Director, ACC Limited, Mumbai & Currently Chairman, Conmat Technologies Ltd, Kolkata, India

This multidisciplinary title on cement production technology covers the entire process spectrum of cement production, starting from extraction and winning of natural raw materials to the finished products including the environmental impacts and research trends.

CRC Press

Market: Civil Engineering

May 2018: 7 x 10: 419pp

Hb: 978-1-138-57066-5: **\$179.95**

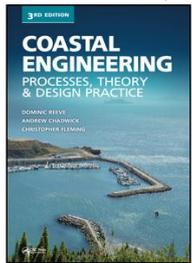
eBook: 978-0-203-70333-5

* For full contents and more information, visit: www.crcpress.com/9781138570665

3rd Edition · TEXTBOOK · READER

Coastal Engineering

Processes, Theory and Design Practice



Dominic Reeve, University of Swansea, UK, **Andrew Chadwick**, retired from University of Plymouth, UK and **Christopher Fleming**, Halcrow Group Ltd.

Coastal Engineering is a must-have book for final year undergraduate and engineering MSc students specializing in coastal engineering and management. This third edition covers a number of developments, with updates to conceptual and detailed design; a detailed example is given for the calculation of extreme wave conditions for design; and a rethinking of coastal system behaviour in the light of NERC's iCOASST project – along with a new section on the components of surge; the method for tidal analysis and calculation of amplitudes and phases of harmonic constituents from water level time series; a worked example of harmonic analysis; and an revised section on the Tohoku tsunami.

CRC Press

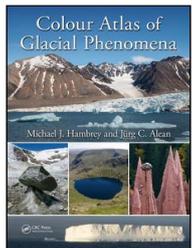
Market: Environmental and Coastal Engineering

April 2018: 512pp

Hb: 978-1-138-06042-5: **\$165.00**Pb: 978-1-138-06043-2: **\$61.95**

eBook: 978-1-351-16552-5

Prev. Ed Pb: 978-0-415-58353-4

* For full contents and more information, visit: www.crcpress.com/9781138060432**Colour Atlas of Glacial Phenomena**

Michael J. Hambrey, Aberystwyth University, UK and **Jürg C. Alean**, Kantonsschule Zürcher Unterland, Switzerland

In a world where human civilization is increasingly impacted by the effects of changing glacial activity, *Colour Atlas of Glacial Phenomena* presents itself as an indispensable guide for students, professionals, and researchers who want to be better informed while studying and tracking the future influences of glaciers and ice sheets on the global environment. While stressing both the beauty and utility of glaciers, the authors cover critical features of glaciers and their landforms and provide useful explanations of the key concepts in glaciology and glacial geology.

CRC Press

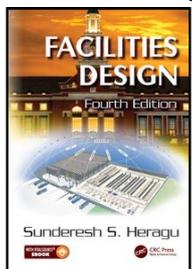
September 2016: 7 x 10: 382pp

Hb: 978-1-482-23440-4: **\$190.00**Pb: 978-1-138-48160-2: **\$80.00**

eBook: 978-1-315-37315-7

* For full contents and more information, visit: www.crcpress.com/9781482234404

4th Edition · TEXTBOOK · READER

Facilities Design

Sunderesh S. Heragu, Oklahoma State University, Stillwater, USA

This textbook continues to strike a healthy balance between theory and practice. It provides students with an understanding of the practical aspects of implementing preliminary design development through analytical models. This new edition features chapter reorganization, rewrites, deletion of some material, updates with current material, addition of motivating case studies for each chapter. Many ancillaries are included.

CRC Press

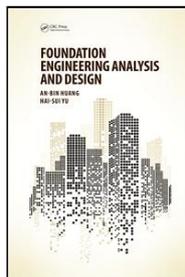
Market: Engineering - Industrial & Manufacturing

May 2016: 7 x 10: 596pp

eBook: 978-1-498-73290-1

Pack - Book and Ebook: 978-1-498-73289-5: **\$139.95**

Prev. Ed Pack - Book and Ebook: 978-1-420-06626-5

* For full contents and more information, visit: www.crcpress.com/9781498732895**Foundation Engineering Analysis and Design**

An-Bin Huang, National Chiao Tung University, Hsinchu, Taiwan and **Hai-Sui Yu**, University of Leeds, UK

This textbook for advanced undergraduates and graduate students covers the analysis, design and construction of shallow and deep foundations and retaining structures as well as the stability analysis and mitigation of slopes. It progressively introduces critical state soil mechanics and plasticity theories such as plastic limit analysis and cavity expansion theories before leading into the theories of foundation, lateral earth pressure and slope stability analysis. It also introduces construction and testing methods used in current practice.

Also with Excel (TM) spreadsheets for all examples in the book, and PowerPoint lecture slides and a solutions manual for

lecturers.

CRC Press

Market: Geotechnical Engineering

December 2017: 7 x 10: 601pp

Hb: 978-1-138-72078-7: **\$144.95**Pb: 978-1-138-72079-4: **\$79.95**

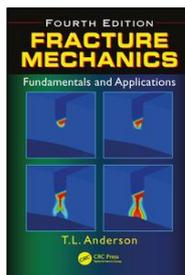
eBook: 978-1-351-25540-0

* For full contents and more information, visit: www.crcpress.com/9781138720794

4th Edition · TEXTBOOK

Fracture Mechanics

Fundamentals and Applications, Fourth Edition



Ted L. Anderson, Quest Integrity Group, Boulder USA

Fracture Mechanics: Fundamentals and Applications, Fourth Edition is the most useful and comprehensive guide to fracture mechanics available. It has been adopted by more than 150 universities worldwide and used by thousands of engineers and researchers. This new edition reflects the latest research, industry practices, applications, and computational analysis and modeling. It encompasses theory and applications, linear and nonlinear fracture mechanics, solid mechanics, and materials science with a unified, balanced, and in-depth approach. Numerous chapter problems have been added or revised, and additional resources are available for those teaching college courses or training sessions.

CRC Press

Market: Engineering - Mechanical

February 2017: 7 x 10: 670pp

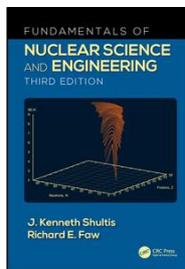
Hb: 978-1-498-72813-3: **\$170.00**

eBook: 978-1-315-37029-3

Prev. Ed Hb: 978-0-849-31656-2

* For full contents and more information, visit: www.crcpress.com/9781498728133

3rd Edition · TEXTBOOK

Fundamentals of Nuclear Science and Engineering

J. Kenneth Shultis, Kansas State University, Manhattan, USA and **Richard E. Faw**, Kansas State University, Manhattan, USA

Fundamentals of Nuclear Science and Engineering, Third Edition, presents coverage of the nuclear science and engineering concepts needed to understand and quantify the whole range of nuclear phenomena. Noted for its accessible level and approach, this long-time bestselling textbook provides overviews of nuclear physics, nuclear power generation, medicine, propulsion, and radiation detection. The Third Edition features updated coverage of the newest nuclear reactor designs, fusion reactors, radiation health risks, and expanded discussion of basic reactor physics with added examples.

CRC Press

Market: Engineering - Mechanical

September 2016: 7 x 10: 660pp

Hb: 978-1-498-76929-7: **\$170.00**

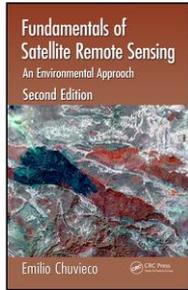
Prev. Ed Hb: 978-1-420-05135-3

* For full contents and more information, visit: www.crcpress.com/9781498769297

2nd Edition • TEXTBOOK • READER

Fundamentals of Satellite Remote Sensing

An Environmental Approach, Second Edition



Emilio Chuvieco, Universidad de Alcalá

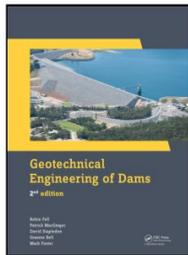
Satellite earth observation is a very dynamic field of science, as it is closely related to developments in several new technologies: sensors, satellite missions, and computer resources. The updated version of this book covers the most relevant issues related to the acquisition and interpretation of remotely sensed data. The original environmental scope of the textbook is now emphasized by extending examples of EO environmental applications. The book has the same structure, but all chapters are updated and all figures are in color.

CRC Press

Market: Environmental Science
 March 2016: 6-1/8 x 9-1/4: 468pp
 Hb: 978-1-498-72805-8: **\$105.00**
 eBook: 978-1-498-72807-2
 Prev. Ed Hb: 978-0-415-31084-0

* For full contents and more information, visit: www.crcpress.com/9781498728058

2nd Edition

Geotechnical Engineering of Dams

Robin Fell, School of Civil and Environmental Engineering, University of New South Wales, Wahroonga, New South Wales, Australia, Patrick MacGregor, Consulting Engineering Geologist, Australia, David Stapledon, Consulting Engineering Geologist, Australia, Graeme Bell, Consulting Dams Engineer, Australia and Mark Foster, URS Australia, Artarmon, New South Wales, Australia

This book provides a comprehensive text on the geotechnical and geological aspects of the investigations for and the design and construction of new dams and the review and assessment of existing dams. The book provides dam engineers and

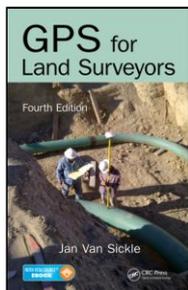
geologists with a practical approach, and gives university students an insight into the subject of dam engineering. All phases of investigation, design and construction are covered, through to the preliminary and detailed design phases and ultimately the construction phase. This revised and expanded 2nd edition includes a lengthy new chapter on the assessment of the likelihood of failure of dams by internal erosion and piping.

CRC Press

Market: Geotechnical Engineering
 November 2014: 1348pp
 Hb: 978-1-138-00008-7: **\$340.00**
 Pb: 978-1-138-74934-4: **\$129.95**
 eBook: 978-0-203-38731-3
 Prev. Ed Hb: 978-0-415-36440-9

* For full contents and more information, visit: www.crcpress.com/9781138000087

4th Edition • TEXTBOOK • READER

GPS for Land Surveyors

Jan Van Sickle, Van Sickle LLC, Denver, Colorado, USA

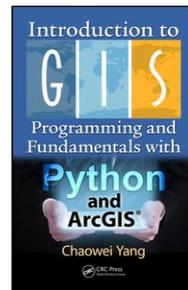
For more than a decade, GPS for Land Surveyors has been unique among other books due to its clear, straightforward treatment of the subject matter. It minimizes reliance on mathematical explanations and maximizes use of illustrations and examples that allow readers to visualize and grasp key concepts. Neither simplistic nor overly technical, this book introduces the concepts needed to understand and use GPS and Global Navigation Satellite Systems (GNSS). Fully updated, the fourth edition addresses changes in hardware, software, and procedures. Novel signals on new blocks of satellites previously addressed in the third edition (L5 and L2C) are now given a more comprehensive treatment.

CRC Press

Market: GIS, Remote Sensing, and Cartography
 June 2015: 6-1/8 x 9-1/4: 368pp
 eBook: 978-1-466-58311-5
 Pack - Book and Ebook: 978-1-466-58310-8: **\$107.00**
 Prev. Ed Pack - Book and Ebook: 978-0-849-39195-8

* For full contents and more information, visit: www.crcpress.com/9781466583108

TEXTBOOK • READER

Introduction to GIS Programming and Fundamentals with Python and ArcGIS®

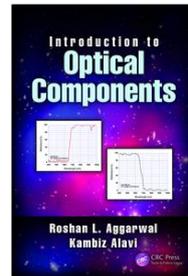
Chaowei Yang, Department of Geography and Geoinformation Science, George Mason University, Fairfax, Virginia, USA

Combining GIS concepts and fundamental spatial thinking methodology with real programming examples, this book introduces popular Python-based tools and their application to solving real-world problems. It elucidates the programming constructs of Python with its high-level toolkits and demonstrates its integration with ArcGIS Theory. Filled with hands-on computer exercises in a logical learning workflow this book promotes increased interactivity between instructors and students while also benefiting professionals in the field with vital knowledge to sharpen their programming skills. Readers receive

expert guidance on modules, package management, and handling shapefile formats needed to build their own mini-GIS.

CRC Press

Market: Geospatial
 April 2017: 6-1/8 x 9-1/4: 302pp
 Hb: 978-1-466-51008-1: **\$99.95**
 eBook: 978-1-466-51009-8

* For full contents and more information, visit: www.crcpress.com/9781466510081**Introduction to Optical Components**

Roshan L. Aggarwal, MIT Lincoln Laboratory and Kambiz Alavi, University of Texas at Arlington, Department of Electrical Engineering Nedderman Hall 518

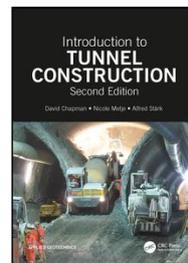
This book describes in detail the following optical components and their applications: lenses, mirrors, diffraction gratings, optical windows, optical filters, beam splitters, light sources, infrared and optical detectors. The book allows the reader to learn about several optical components used in optical system design and evaluation, with emphasis on applications and material selection. While it gives many formulas for design and analysis, it keeps derivations to a minimum.

CRC Press

Market: Engineering - Electrical
 March 2018: 6-1/8 x 9-1/4: 183pp
 Hb: 978-0-815-39291-0: **\$119.95**
 eBook: 978-1-351-18951-4

* For full contents and more information, visit: www.crcpress.com/9780815392910

2nd Edition • TEXTBOOK • READER

Introduction to Tunnel Construction

David N. Chapman, University of Birmingham, United Kingdom, Nicole Metje and Alfred Stark

Series: Applied Geotechnics

This is a text for undergraduate and MSc students and a guide for young professionals, covering the full principles with case studies of real projects. This new edition includes case studies from Crossrail, focusing on the preparation work to receive a TBM into a station box, and updating the Utilisation Method for assessing the remaining structural capacity of sprayed concrete lining. It also provides further information on recent developments in TBMs, including multimode machines. With some focus on clay soil, the book covers the main tunnelling

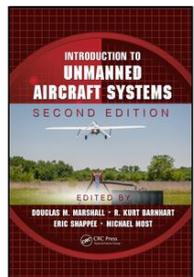
techniques along with site investigation, parameter selection and design, ground stability, lining techniques, H&S, monitoring, and TBMs.

CRC Press

Market: Civil and Structural Engineering
 December 2017: 7 x 10: 425pp
 Hb: 978-1-498-76639-5: **\$179.95**
 Pb: 978-1-498-76624-1: **\$69.95**
 eBook: 978-1-498-76625-8

* For full contents and more information, visit: www.crcpress.com/9781498766241

2nd Edition · TEXTBOOK · READER

Introduction to Unmanned Aircraft Systems

Edited by **Douglas M. Marshall**, TrueNorth Consulting LLC, Grand Forks, North Dakota, USA, **Richard K. Barnhart**, Kansas State Polytechnic, Salina, USA, **Eric Shappee**, Kansas State Polytechnic, Salina, USA and **Michael Thomas Most**, Kansas State Polytechnic, Salina, USA

This textbook surveys the fundamentals of unmanned aircraft system (UAS) operations, from sensors, controls, and automation to regulations, safety procedures, and human factors. Fully updated and significantly expanded, the second edition reflects the proliferation of technological capability, miniaturization, and demand for aerial intelligence in a post-9/11 world. Capitalizing on the expertise of contributing authors, this edition presents the latest major commercial uses of UASs and unmanned aerial

vehicles (UAVs), as well as enhanced coverage with greater depth and support for more advanced coursework.

CRC Press

Market: Aerospace Engineering & Aviation

May 2016: 6-3/4 x 9-1/2: 377pp

Hb: 978-1-482-26393-0: \$125.00

eBook: 978-1-482-26395-4

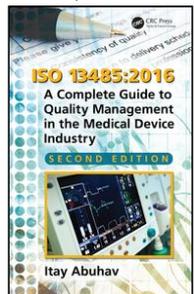
Prev. Ed Hb: 978-1-439-83520-3

* For full contents and more information, visit: www.crcpress.com/9781482263930

2nd Edition · NEW EDITION

ISO 13485:2016

A Complete Guide to Quality Management in the Medical Device Industry, Second Edition



Itay Abuhav, Independent Quality Consultants, Switzerland

This book will be a substantial revision, which will reflect the new version of the ISO 13485:2016. This represents the standard protocols that all medical device manufacturers must follow, in the fabrication of their products. It will focus on changes in the structure of the quality management system; change in the documentation for quality management systems and finally, present the different methods of implementation of the standard requirements within the organization. This new version was initiated in 2016, thus all appropriate enterprises using the old standard must convert to the new version, now available. The Second Edition will clarify, explain and demonstrate the new version.

CRC Press

Market: Biomedical Science

May 2018: 6-1/8 x 9-1/4: 878pp

Hb: 978-1-138-03917-9: \$149.95

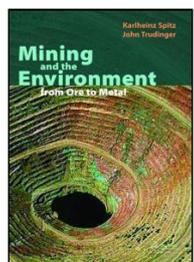
eBook: 978-1-351-00079-6

* For full contents and more information, visit: www.crcpress.com/9781138039179

TEXTBOOK · READER

Mining and the Environment

From Ore to Metal



Karlheinz Spitz, Environmental Resources Management, Perth, Australia and **John Trudinger**, Trudinger Consulting, St. Kilda, Australia

Practice-oriented reference book that identifies the wide range of social and environmental issues pertaining to mining. Particular reference is made to mining in developing countries. Gives an extensive overview of issues of concern and illustrates how environmental impact assessment integrates with the mining lifecycle, how negative and positive aspects can be eliminated, resp. accentuated. Presents practical approaches to manage issues ranging from land acquisition and resettlement of indigenous peoples, through technical aspects of acid rock

drainage and mine waste management, to an analysis of sharing benefits with host communities, allowing mining to become a sustainable economic activity. Includes many real-life case studies. Key reading for environmental consultants, students, operators, regulators, and environmental personnel in oil and gas industry; large part of subject matter applies to the extractive industries as a whole.

CRC Press

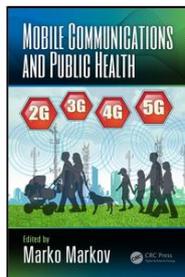
Market: Mining & Environmental Engineering

December 2008: 900pp

Hb: 978-0-415-46509-0: \$370.00

Pb: 978-0-415-46510-6: \$170.00

eBook: 978-1-466-57352-9

* For full contents and more information, visit: www.crcpress.com/9780415465106**Mobile Communications and Public Health**

Edited by **Marko Markov**, Williamsville, New York, USA

This book represents a comprehensive overview of the distribution of the various forms of mobile communications (with increasing variations and intensities) devices, which represent a serious hazard to the biosphere and especially mankind, due to the lack of controls of sources of mobile communication signals and absence of monitoring of the health of individuals, exposed to microwave radiation. It also entails a review of engineering of mobile communication devices and a summary of basic science evidence of the effects of microwave biological exposure. There is also unique coverage on the potential hazards of mobile communications on children.

CRC Press

Market: Engineering - Electrical

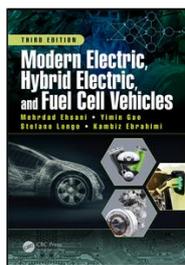
June 2018: 6-1/8 x 9-1/4: 264pp

Hb: 978-1-138-56842-6: \$149.95

eBook: 978-0-203-70510-0

* For full contents and more information, visit: www.crcpress.com/9781138568426

3rd Edition · TEXTBOOK

Modern Electric, Hybrid Electric, and Fuel Cell Vehicles

Mehrdad Ehsani, Texas A&M University, College Station, USA, **Yimin Gao**, Advanced Vehicle Research Center, Danville, Virginia, USA, **Stefano Longo**, Cranfield University, UK and **Kambiz Ebrahimi**, Loughborough University, UK

The book deals with the fundamentals, theoretical bases, and design methodologies of conventional internal combustion engine (ICE) vehicles, electric vehicles (EVs), hybrid electric vehicles (HEVs), and fuel cell vehicles (FCVs). The design methodology is described in mathematical terms, step-by-step, and the topics are approached from the overall drive train system, not just individual components. Furthermore, in explaining the design methodology of each drive train, design

examples are presented with simulation results.

CRC Press

Market: Engineering - Electrical

February 2018: 7 x 10: 546pp

Hb: 978-1-498-76177-2: \$139.95

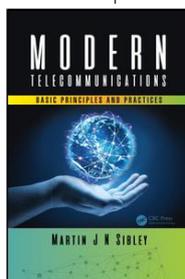
eBook: 978-0-429-50488-4

* For full contents and more information, visit: www.crcpress.com/9781498761772

TEXTBOOK · READER

Modern Telecommunications

Basic Principles and Practices



Martin J N Sibley, University of Huddersfield, West Yorkshire, United Kingdom

This is an introductory text that will equip readers with the necessary tools to study telecommunications further. It explains the fundamentals and background behind digital TV, radio, cell phones, and satellites as well as the legacy analogue transmissions. It covers digital modulation and analogue communications as this is something many people still use (VHF FM for example). The book also clearly explains the mathematics and simplifies the process to make it more approachable to students.

CRC Press

Market: Engineering - Electrical

April 2018: 6-1/8 x 9-1/4: 190pp

Hb: 978-1-138-57882-1: \$129.95

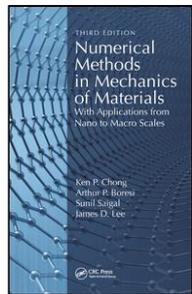
eBook: 978-1-351-26360-3

* For full contents and more information, visit: www.crcpress.com/9781138578821

TEXTBOOK · READER

Numerical Methods in Mechanics of Materials, 3rd ed

With Applications from Nano to Macro Scales



Ken P. Chong, George Washington University, USA, **Arthur P. Boresi**, University of Wyoming, USA, **Sunil Saigal**, New Jersey Institute of Technology, USA and **James D. Lee**, George Washington University, USA

Computers and software can be used to model and analyze complex physical systems and problems. But the effective solution of an engineering problem and the efficient and accurate use of numerical results require some physical modeling of the problem and a proper understanding of the assumptions employed, otherwise there is risk of blundering through the blind acceptance of computer results. This book provides some of the background and knowledge necessary to avoid these pitfalls, especially the most commonly used numerical methods

employed in the solution of physical problems. It offers an in-depth presentation of the numerical methods for scales from the nano to the macro.

CRC Press

Market: Mechanical and Structural Engineering

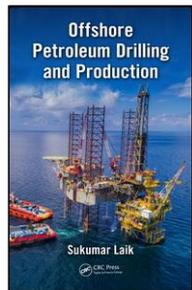
December 2017: 7 x 10: 318pp

Hb: 978-1-138-71916-3: \$139.95

eBook: 978-1-315-14601-0

* For full contents and more information, visit: www.crcpress.com/9781138719163

Offshore Petroleum Drilling and Production



Sukumar Laik

This book provides comprehensive coverage of whole range of activities of offshore oil and gas operations including offshore environments, offshore drilling operation followed by various operations of offshore oil and gas productions.

CRC Press

Market: Engineering - Chemical

February 2018: 6-1/8 x 9-1/4: 628pp

Hb: 978-1-498-70612-4: \$189.00

eBook: 978-1-498-70613-1

* For full contents and more information, visit: www.crcpress.com/9781498706124

3rd Edition · 2 Volume Set · TEXTBOOK

Open Pit Mine Planning and Design, Two Volume Set & CD-ROM Pack



William A. Hustrulid, University of Utah, Salt Lake City, USA, **Mark Kuchta**, Colorado School of Mines, Golden, USA and **Randall K. Martin**, R.K. Martin and Associates, Denver, USA

This textbook enables (under)graduate students to take a fast-track approach to surface and open pit mine planning and design and geological excavation engineering. User-friendly software guides the student through the planning and design steps, and the drillhole data sets allow the described principles to be practised via mining properties case examples. Volume 1

covers fundamental concepts involved in planning and design. Volume 2 deals with the CSMine and MicroMODEL Academic version 8.1 mine planning software packages, which are also included on a CD together with their associated tutorials and user manuals. This third edition has been revised, updated and significantly expanded.

CRC Press

Market: Mining & Petroleum Engineering and Mining

August 2013: 1308pp

eBook: 978-1-482-22117-6

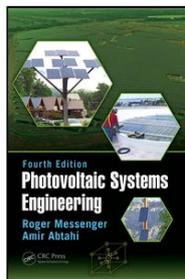
Pack: 978-1-466-57512-7: \$160.00

Prev. Ed Pack: 978-0-415-40741-0

* For full contents and more information, visit: www.crcpress.com/9781466575127

4th Edition · TEXTBOOK

Photovoltaic Systems Engineering



Roger A. Messenger, Florida Atlantic University (FAU), Boca Raton, Florida, USA and **Amir Abtahi**, Florida Atlantic University, Boca Raton, USA

This new edition offers a comprehensive treatment of all phases of Photovoltaic System design, installation, commissioning, inspection, and operation, including why and how the basic system components work on an engineering level. The book also explains the basic physical principles upon which the technology is based and a consideration of the environmental and economic impact of the technology. Content has been completely revised and updated and now includes 10-30 homework problems per chapter. Additionally, there is a solutions manual available for adopting professors.

CRC Press

Market: Engineering - Electrical

March 2017: 6-1/8 x 9-1/4: 504pp

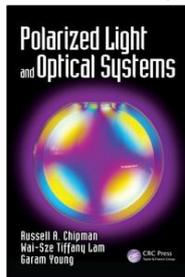
Hb: 978-1-498-77277-8: \$140.00

eBook: 978-1-315-15143-4

Prev. Ed Hb: 978-1-439-80292-2

* For full contents and more information, visit: www.crcpress.com/9781498772778

Polarized Light and Optical Systems



Russell A. Chipman, University of Arizona, Tucson, USA, **Wai Sze Tiffany Lam**, University of Arizona, Tucson, USA and **Garam Young**, Synopsis, Inc., Pasadena, California, USA

Series: Optical Sciences and Applications of Light

Starting from the beginning, this book teaches the fundamentals of polarization along with the advanced information needed for performing and intercepting accurate polarization methods. Developed for the senior undergraduate, graduate, and advanced course of polarization optical design, this carefully thought out and classroom tested text keeps the students in mind. Problem sets, worked examples, case studies, and important mathematical fundamentals are included.

CRC Press

Market: Engineering - Electrical

August 2018: 7 x 10: 982pp

Hb: 978-1-498-70056-6: \$199.95

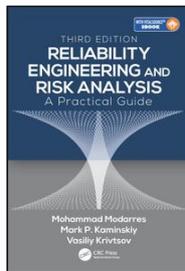
eBook: 978-1-498-70057-3

* For full contents and more information, visit: www.crcpress.com/9781498700566

3rd Edition · TEXTBOOK · READER

Reliability Engineering and Risk Analysis

A Practical Guide, Third Edition



Mohammad Modarres, University of Maryland, College Park, USA, **Mark P. Kaminskiy**, NASA Goddard Space Flight Center, Greenbelt, Maryland, USA and **Vasily Krivtsov**, Ford Motor Company, Dearborn, Michigan, USA

This undergraduate and graduate textbook provides a practical and comprehensive overview of reliability and risk analysis techniques. Written for engineering students and practicing engineers, the book is multi-disciplinary in scope. The new edition has new topics in classical confidence interval estimation; Bayesian uncertainty analysis; models for physics-of-failure approach to life estimation; extended discussions on the generalized renewal process and optimal maintenance; and further modifications, updates, and discussions. The book includes examples to clarify technical subjects and many end of chapter exercises. PowerPoint slides and a Solutions Manual are also available.

CRC Press

Market: Engineering - Industrial & Manufacturing

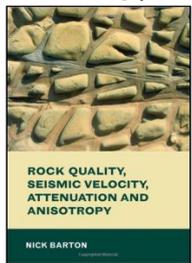
December 2016: 7 x 10: 504pp

Pack - Book and Ebook: 978-1-498-74587-1: \$129.95

Prev. Ed Pack - Book and Ebook: 978-0-849-39247-4

* For full contents and more information, visit: www.crcpress.com/9781498745871

Rock Quality, Seismic Velocity, Attenuation and Anisotropy



Nick Barton, Nick Barton and Associates, Oslo, Norway
This cross-disciplinary work offers an exceptionally relevant examination of those aspects of earth science dealing with seismic behavior of fractured media. It delivers a lucid exploration of rock mechanics, examining the strengths and weakness of structures beneath the earth's immediate surface. Deliberately non-mathematical and phenomenological in nature, this volume reviews examples of seismic measurements from various fields under widely varied conditions, supported by a wealth of figures drawn from a broad review of the literature. The last chapters delve into deeper, higher stress, and large scale applications, specifically fractured petroleum reservoirs, and earthquake

source zone interpretation.

CRC Press

Market: Civil Engineering & Mining / Rock Mechanics / Geophysics

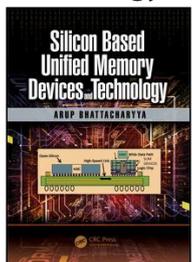
November 2006: 756pp

Hb: 978-0-415-39441-3: **\$265.00**

eBook: 978-0-203-96445-3

* For full contents and more information, visit: www.crcpress.com/9780415394413

Silicon Based Unified Memory Devices and Technology



Arup Bhattacharyya, CEO, ADI Associates (Single Individual Technical Consultancy), Essex Junction, Vermont, USA

The primary focus of this book is on basic device concepts, memory cell design, and process technology integration. The first part provides in-depth coverage of conventional nonvolatile memory devices, stack structures from device physics, historical perspectives, and identifies limitations of conventional devices. The second part reviews advances made in reducing and/or eliminating existing limitations of NVM device parameters from the standpoint of device scalability, application extensibility, and reliability. The final part proposes multiple options of silicon based unified (nonvolatile) memory cell concepts and stack

designs (SUMs).

CRC Press

Market: Engineering - Electrical

June 2017: 7 x 10: 512pp

Hb: 978-1-138-03271-2: **\$149.95**

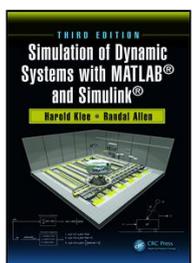
Pb: 978-1-138-74632-9: **\$79.95**

eBook: 978-1-315-20686-8

* For full contents and more information, visit: www.crcpress.com/9781138032712

3rd Edition · TEXTBOOK · READER

Simulation of Dynamic Systems with MATLAB® and Simulink®



Harold Klee, University of Central Florida, Orlando, USA and **Randal Allen**, University of Central Florida, Orlando, USA

Continuous-system simulation is an increasingly important tool for optimizing the performance of real-world systems. The book presents an integrated treatment of continuous simulation with all the background and essential prerequisites in one setting. It features updated chapters and two new sections on Black Swan and the Stochastic Information Packet (SIP) and Stochastic Library Units with Relationships Preserved (SLURP) Standard. The new edition includes basic concepts, mathematical tools, and the common principles of various simulation models for different phenomena, as well as an abundance of case studies, real-world

examples, homework problems, and equations to develop a practical understanding of concepts.

CRC Press

Market: Engineering - Electrical

November 2017: 7 x 10: 832pp

Hb: 978-1-498-78777-2: **\$139.95**

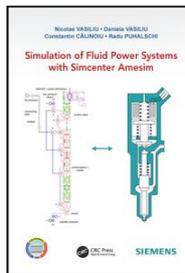
eBook: 978-1-315-15417-6

Prev. Ed Hb: 978-1-439-83673-6

* For full contents and more information, visit: www.crcpress.com/9781498787772



Simulation of Fluid Power Systems with Simcenter Amesim



Nicolae Vasiliu, University Politehnica of Bucharest, Romania, **Daniela Vasiliu**, University Politehnica of Bucharest, Romania, **Constantin CĂLINOIU**, University Politehnica of Bucharest, Romania and **Radu Puhalschi**, Honeywell Corporation, Romania

This book illustrates numerical simulation of fluid power systems by LMS Amesim Platform covering hydrostatic transmissions, electro hydraulic servo valves, hydraulic servomechanisms for aerospace engineering, speed governors for power machines, fuel injection systems, and automotive servo systems.

CRC Press

Market: Engineering - Mechanical

March 2018: 7 x 10: 607pp

Hb: 978-1-482-25355-9: **\$179.95**

eBook: 978-1-482-25356-6

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Single Piles and Pile Groups Under Lateral Loading



Lymon C. Reese, University of Texas, Austin, USA and **William F. Van Impe**, Laboratory of Geotechnics, Ghent University, Belgium

This classic textbook's second edition has been considerably revised and extended to improve its compatibility with the classroom setting. New features include homework problems with solution aids offered by the Student Version of the software as well as new case studies and updated existing case studies consistent with modern methods of characterizing soil

properties. The main focus of the book is a detailed presentation of methods of analysis for single piles and groups of piles under lateral loading. Various practical design examples are included. Textbook for senior undergraduate/graduate courses in pile engineering, foundation engineering and related subjects and for professionals in civil and mining engineering and applied earth sciences. Set of book and software CD-ROM. Homework solutions to exercises available to lecturers.

CRC Press

Market: Geotechnical Engineering

January 2011: 7 x 10: 508pp

eBook: 978-1-439-89430-9

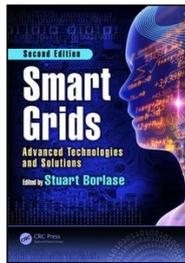
Pack - Book and CD: 978-0-415-46988-3: **\$139.95**

* For full contents and more information, visit: www.crcpress.com/9780415469883

2nd Edition

Smart Grids

Advanced Technologies and Solutions, Second Edition



Edited by **Stuart Borlase**, Cary, North Carolina, USA

Series: Electric Power and Energy Engineering

The book describes the impetus for change in the electric utility industry and discusses the business drivers, benefits, and market outlook of the smart grid initiative. The Second Edition looks at the last five years, with discussions on the evolving barriers and successes with new sections, chapters, and updates. Written by over 100 experts in the field from industry and academia, the reader will understand the achievements and benefits to the utility, consumer, society, and environment, while examining the technical framework of enabling technologies and smart solutions to drive the smart grid effort.

CRC Press

Market: Engineering - Electrical

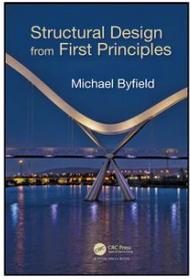
December 2017: 7 x 10: 805pp

Hb: 978-1-498-79955-3: **\$149.95**

eBook: 978-1-351-22848-0

* For full contents and more information, visit: www.crcpress.com/9781498799553

TEXTBOOK · READER

Structural Design from First Principles

Michael Byfield

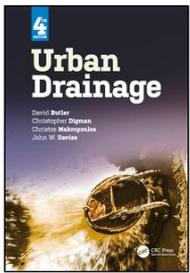
This undergraduate civil engineering textbook explains structural design from its mechanical principles rather than design codes. It presents good approximate solutions to complex design problems, such as "Wembley-Arch" type structures, the design of thin-walled structures, and long-span box girder bridges. These relatively simple techniques enable quick, early stage, "ball-park" design solutions, and are also useful for checking finite element analysis solutions to complex problems. It is consistent with the Eurocodes, but with the underlying theory fully explained. Explanation is closely linked to a structured series of worked examples at the end of each section

CRC Press

Market: Structural Engineering
 February 2018: 7 x 10: 315pp
 Hb: 978-1-138-50349-6: **\$129.95**
 Pb: 978-1-498-74121-7: **\$59.95**
 eBook: 978-1-498-74123-1

* For full contents and more information, visit: www.crcpress.com/9781498741217

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Urban Drainage

David Butler, University of Exeter, UK, Christopher James Digman, Christos Makropoulos, National Technical University of Athens, Zografou, Greece and John W. Davies

This new edition covers the drainage of rainwater and wastewater. It deals comprehensively with the analysis and design of new systems and of existing infrastructure. Combining principles, practice and research, it provides significant new material on modelling, risk, smart urban drainage, and the global and local context. This is an essential text for undergraduate and Masters students in water engineering, environmental and public health engineering, engineering hydrology, and related disciplines. It is written in line with BS EN, WaPUG, serving as a reference for drainage design and drainage operation engineers and consulting engineers. It is illustrated with extensive examples.

CRC Press

Market: Water Science & Engineering
 April 2018: 7 x 10: 552pp
 Hb: 978-1-498-75293-0: **\$149.95**
 Pb: 978-1-498-75058-5: **\$69.95**
 eBook: 978-1-351-17430-5

* For full contents and more information, visit: www.crcpress.com/9781498750585

2nd Edition · NEW EDITION

Advanced Applications in Remote Sensing of Agricultural Crops and Natural Vegetation

Edited by **Prasad S. Thenkabail**, U.S. Geological Survey, Arizona, USA, **John G. Lyon**, Clifton, Virginia, USA and **Alfredo Huete**, University of Technology, Sydney

This volume discusses the use of hyperspectral data in numerous applications such as forest management, precision farming, monitoring invasive species, and local to global land cover change detection. Also covers new applications such as crop yield modeling, crop biophysical and biochemical property characterization, and crop moisture assessment. It emphasizes the importance of hyperspectral remote sensing tools for studying vegetation processes and function. Each chapter focuses on specific applications, reviews existing "state-of-art" knowledge, highlights the advances made, and provides guidance for appropriate use of hyperspectral data for vegetation management practices.

CRC Press

Market: Environmental Science

December 2018: 7 x 10: 428pp

Hb: 978-1-138-36476-9: \$149.95

eBook: 978-0-429-43116-6

* For full contents and more information, visit: www.crcpress.com/9781138364769

2nd Edition · NEW EDITION

Biophysical and Biochemical Characterization and Plant Species Studies

Edited by **Prasad S. Thenkabail**, U.S. Geological Survey, Arizona, USA, **John G. Lyon**, Clifton, Virginia, USA and **Alfredo Huete**, University of Technology, Sydney

Hyperspectral remote sensing has been increasingly used in studding and assessing biophysical and biochemical properties of agricultural crops. This volume demonstrates the experience and the methods used in studying terrestrial vegetation using hyperspectral data. It focuses on specific applications, reviews existing "state-of-art" knowledge, highlights the advances made, and provides guidance for appropriate use of hyperspectral data in applications such as crop yield modeling, crop biophysical and biochemical property characterization, and crop moisture assessment. Includes extensive discussions on data processing and how to implement data processing mechanisms.

CRC Press

Market: Environmental Science

December 2018: 7 x 10: 384pp

Hb: 978-1-138-36471-4: \$149.95

eBook: 978-0-429-43118-0

* For full contents and more information, visit: www.crcpress.com/9781138364714

Climate Change and Crop Production

Foundations for Agroecosystem Resilience

Edited by **Noureddine Benkeblia**, Department of Life Sciences, University of West Indies, Kingston, Jamaica

Series: Advances in Agroecology

Presenting an overview of agroecology within the framework of climate change, this book looks at the impact of our changing climate on crop production and agroecosystems, reporting on how plants will cope with these changes, and how we can mitigate these negative impacts to ensure food production for the growing population. It explores the ways that farmers can confront the challenges of climate change, with contributed chapters from around the world demonstrating the different challenges associated with differing climates. Examples are provided of the approaches being taken *right now* to expand the ecological, physiological, morphological, and productive potential of a range of crop types.

CRC Press

Market: Agricultural Science

November 2018: 7 x 10: 216pp

Hb: 978-1-138-03234-7: \$99.95

eBook: 978-1-315-39186-1

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2nd Edition · NEW EDITION

Fundamentals, Sensor Systems, Spectral Libraries, and Data Mining for Vegetation

Edited by **Prasad S. Thenkabail**, U.S. Geological Survey, Arizona, USA, **John G. Lyon**, Clifton, Virginia, USA and **Alfredo Huete**, University of Technology, Sydney

Introducing the widely used operational airborne hyperspectral sensors across platforms and the data acquired in numerous unique spectral bands in the entire length of the spectrum, this book discusses both the strengths and the limitations of the topics covered: (a) hyperspectral processes, (b) sensors, and (c) data analysis. Each chapter reviews existing "state-of-art" knowledge, highlights the advances made, and provides guidance for appropriate use of hyperspectral data in study of vegetation and its numerous applications. The concluding chapter provides readers with the editor's view and guidance on the highlights and the essence of the Volume 1 and the editor's perspective.

CRC Press

Market: Environmental Science

December 2018: 7 x 10: 490pp

Hb: 978-1-138-05854-5: \$149.95

eBook: 978-1-315-16415-1

Prev. Ed Hb: 978-1-439-84537-0

* For full contents and more information, visit: www.crcpress.com/9781138058545

2nd Edition · NEW EDITION

Hyperspectral Indices and Image Classifications for Agriculture and Vegetation

Edited by **Prasad S. Thenkabail**, U.S. Geological Survey, Arizona, USA, **John G. Lyon**, Clifton, Virginia, USA and **Alfredo Huete**, University of Technology, Sydney

Evaluating the performance of various types of hyperspectral vegetation indices in characterizing agricultural crops, this volume discusses non-invasive quantification of foliar pigments, leaf nitrogen concentration of cereal crop, the estimation of nitrogen content in crops and pastures, forest leaf chlorophyll content, among others. Each chapter reviews existing "state-of-art" knowledge, highlights the advances made, and provides guidance for appropriate use of hyperspectral images in study of vegetation. The concluding chapter provides readers with the editor's view and guidance on the highlights and the essence of the Volume 2 and the editor's perspective.

CRC Press

Market: Environmental Science

December 2018: 7 x 10: 330pp

Hb: 978-1-138-06603-8: \$179.95

eBook: 978-1-315-15933-1

* For full contents and more information, visit: www.crcpress.com/9781138066038

Hyperspectral Remote Sensing of Vegetation, Second Edition, Four Volume Set

Edited by **Prasad S. Thenkabail**, U.S. Geological Survey, Arizona, USA, **John G. Lyon**, Clifton, Virginia, USA and **Alfredo Huete**, University of Technology, Sydney

This book demonstrates the experience, utility, methods and models used in studying terrestrial vegetation using hyperspectral data. Written by global experts, each chapter focuses on specific applications, reviews existing "state-of-art" knowledge, highlights the advances made, and provides guidance for appropriate use of hyperspectral data in study of vegetation and its numerous applications such as crop yield modeling, crop biophysical and biochemical property characterization, and crop moisture assessment. The second edition includes extensive discussions on data processing and how to implement data processing mechanisms in a standard, fast, and efficient manner for their applications.

CRC Press

Market: Environmental Science

December 2018: 7 x 10: 1568pp

Hb: 978-1-138-06625-0: \$499.95

* For full contents and more information, visit: www.crcpress.com/9781138066250

2nd Edition · NEW EDITION

Analysis of Pesticides in Food and Environmental Samples, Second Edition

Edited by **Jose L. Tadeo**, INIA, Madrid, Spain

This book provides a critical overview of analytical methods used for the determination of pesticide residues and other contaminants in food and environmental samples by modern instrumental analysis. It contains up-to-date material including recent trends in sample preparation, general methods used for pesticide analysis and quality assurance aspects, and chromatographic and immunoassay methods. The rest of the book describes particular analytical methods used for the determination of pesticides in food and soil, water and air. In addition, the levels of these chemicals found in food, their regulatory aspects and the monitoring of pesticides in the environment are described.

CRC Press

Market: Chemistry

March 2019: 6-1/8 x 9-1/4: 385pp

Hb: 978-1-138-48603-4: **\$159.95**

eBook: 978-1-351-04708-1

Prev. Ed Hb: 978-0-849-37552-1

* For full contents and more information, visit: www.crcpress.com/9781138486034

Animal Sourced Foods for Developing Economies

Preservation, Nutrition, and Safety

Edited by **Muhammad Issa Khan**, University of Agriculture, Faisalabad, Pakistan and **Aysha Sameen**, University of Agriculture, Faisalabad, Pakistan*Series: World Food Preservation Center Book Series*

Animal foods can play an important role in the human diet as a source of protein, vitamins, and minerals. But many in developing economies lack a good source of animal-based foods. This book addresses: food safety and nutritional status in the developing world, contribution of animal origin foods in human health, different sources of animal foods along with their preservation strategies, safety and quality of animal-derived foods, functional outcomes; issues and policies. Each chapter is dedicated to a specific type of food from animal source, its nutritional significance, preservation techniques, processed products, safety and quality aspects on conceptual framework.

CRC Press

Market: Food & Culinary Science

January 2019: 7 x 10: 312pp

Hb: 978-1-498-77895-4: **\$179.95**

eBook: 978-0-429-39857-5

* For full contents and more information, visit: www.crcpress.com/9781498778954

Food Nanotechnology

Principles and Applications

Edited by **C. Anandharamakrishnan**, Director, Indian Institute of Food Processing Technology and **S. Parthasarathi**, CSIR-Central Food Technological Research Institute, Mysore, India*Series: Contemporary Food Engineering*

The use of nanotechnology in the food industry promises improved taste, flavor, color, texture, and consistency of foodstuffs and increased absorption and bioavailability of nutraceuticals. This book explains the fundamental principles of nanotechnology and includes a number of case studies of the major techniques successfully employed by the food industry. This book clearly discusses the four major areas in food nanotechnology: fabrication of nanofood particles and its delivery, packaging and diagnostics, characterization methods of nanoparticles and regulatory issues in application of nanotechnology in food.

CRC Press

Market: Food & Culinary Science

February 2019: 7 x 10: 472pp

Hb: 978-1-498-76717-0: **\$189.95**

eBook: 978-1-315-15387-2

* For full contents and more information, visit: www.crcpress.com/9781498767170

Hyperspectral Imaging Analysis and Applications for Food Quality

Edited by **N.C. Basantia**, Cavinkare Research Centre, Chennai, India, **Leo M.L. Nollet**, University College Ghent, Belgium (Retired) and **Mohammed Kamruzzaman**, Department of Food Technology and Rural Industries, Bangladesh Agricultural University, Bangladesh*Series: Food Analysis & Properties*

In processing food, hyperspectral imaging, combined with intelligent software, enables digital sorters (or optical sorters) to identify and remove defects and foreign material that are invisible to traditional camera and laser sorters. This book explores the theoretical and practical issues associated with the development, analysis, and application of essential image processing algorithms in order to exploit hyperspectral imaging for food quality evaluations. It outlines strategies and essential image processing routines that are necessary for making the appropriate decision during detection, classification, identification, quantification and/or prediction processes.

CRC Press

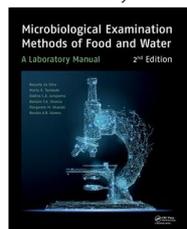
Market: Food Science

December 2018: 7 x 10: 280pp

Hb: 978-1-138-63079-6: **\$199.95*** For full contents and more information, visit: www.crcpress.com/9781138630796

Microbiological Examination Methods of Food and Water

A Laboratory Manual, 2nd Edition



Neusely da Silva, Institute of Food Technology - ITAL, Campinas, SP, Brazil, **Marta H. Taniwaki**, Institute of Food Technology - ITAL, Campinas, SP, Brazil, **Valéria C.A. Junqueira**, Institute of Food Technology - ITAL, Campinas, SP, Brazil, **Neliane Silveira**, Institute of Food Technology - ITAL, Campinas, SP, Brazil, **Margarete Midori Okazaki**, Institute of Food Technology - ITAL, Campinas, SP, Brazil and **Renato Abeilar Romeiro Gomes**, Institute of Food Technology - ITAL, Campinas, SP, Brazil

Microbiological Examination Methods of Food and Water is an illustrated laboratory handbook that provides an overview of current standard microbiological culture methods for the examination of food and water, adhered to by renowned international organizations, such as ISO, AOAC, APHA, FDA and FSIS/USDA. It includes methods for the enumeration of indicator microorganisms of general contamination, indicators of hygiene and sanitary conditions, sporeforming, spoilage fungi and pathogenic bacteria. This new edition features many new and updated subsections, bringing the handbook wholly in line with current practice.

CRC Press

Market: Food Science and Technology

October 2018: 8-1/2 x 11: 484pp

Hb: 978-1-138-09188-7: **\$199.95**Pb: 978-1-138-05711-1: **\$129.95**

eBook: 978-1-315-16501-1

* For full contents and more information, visit: www.crcpress.com/9781138057111

MS Techniques in Food and Environment under Ambient Conditions

Edited by **Leo M.L. Nollet**, University College Ghent, Belgium (Retired) and **Basil K. Munjanja**, National University of Science and Technology, Zimbabwe*Series: Food Analysis & Properties*

Many methods for generating ions for mass spectrometry require the analyte to be presented either directly under high vacuum or contained in a solution. Ambient ionization MS techniques direct a stream of ionizing or ion-desorbing fluid medium onto a sample surface from which analyte ions are withdrawn and transported through air into the mass analyzer via a standard API interface. A sample only needs to be exposed to the ionizing medium under ambient conditions.

CRC Press

Market: Life Sciences

March 2019: 7 x 10: 264pp

Hb: 978-1-138-50556-8: **\$169.95**

eBook: 978-1-315-14683-6

* For full contents and more information, visit: www.crcpress.com/9781138505568

Nanoscience and Nanotechnology in Foods and Beverages

Vellaichamy Chelladurai and Digvir S. Jayas

Potential applications of nanotechnology in food industry include: encapsulation and delivery of substances in targeted sites, increasing flavor, introducing antibacterial nanoparticles into food, enhancing shelf life, sensing contamination, improved food storage, tracking, tracing, and brand protection. This book provides a basic understanding of the nanoscience and nanotechnology and their applications to different food industry sectors, covering both benefits and drawbacks using nanotechnology in food processing and discussing the development of an international regulatory framework.

CRC Press

Market: Food & Culinary Science

November 2018: 6-1/8 x 9-1/4: 322pp

Hb: 978-1-498-76063-8: \$169.95

eBook: 978-1-498-76064-5

* For full contents and more information, visit: www.crcpress.com/9781498760638

Postharvest Extension and Capacity Building for the Developing World

Edited by Majeed Mohammed and Vijay Yadav Tokala

Series: World Food Preservation Center Book Series

This book provides information on postharvest extension/outreach programs, capacity building and practical methodologies for postharvest extension professionals and food science teachers, food processing trainers and outreach specialists who work in the field. The book provides information on training of postharvest trainers, food loss assessment methods, capacity building in universities and agro-industry, distance education methods, models for cost effective postharvest/food processing extension work, success stories and lessons learned from past projects and programs. Chapters will cover postharvest extension work and capacity building in a wide range of regions.

CRC Press

Market: Food Nutrition

December 2018: 7 x 10: 216pp

Hb: 978-1-138-06928-2: \$169.95

eBook: 978-1-315-11577-1

* For full contents and more information, visit: www.crcpress.com/9781138069282

Postharvest Pathology of Fresh Horticultural Produce

Edited by Lluís Palou, Joseph L. Smilanick and Sunil Pareek, National Institute of Food Technology Entrepreneurship and Management, Kundli, India

Series: Innovations in Postharvest Technology Series

Fruits and vegetables are more perishable crops than cereal, pulses and oil seed crops. Depending on the type and degree of infection, they can largely deteriorate during storage causing considerable postharvest losses. In addition, contamination by mycotoxins also pose consumer health risks. This comprehensive book describes the most important postharvest diseases of fruits and vegetables, their symptoms, key aspects related to infection and epidemiology, and both conventional and innovative management strategies. Particular fruit diseases are discussed, as are molecular insights in pathogenicity, quiescent infections, mycotoxins detection and control, and safety and security issues.

CRC Press

Market: Food Science

April 2019: 7 x 10: 600pp

Hb: 978-1-138-63083-3: \$209.95

* For full contents and more information, visit: www.crcpress.com/9781138630833

Seaweed Bioactives

Extraction and Characterization Techniques

Edited by Amit K. Jaiswal, Dublin Institute of Technology, School of Food Science and Environmental Health, College of Sciences and Health, Ireland

Series: Functional Foods and Nutraceuticals

Seaweeds are a rich source of number of metabolites such as polyphenols, polysaccharides, fatty acids, proteins, peptides, which can be used as functional ingredients in many industrial applications such as functional food, nutraceuticals, pharmaceuticals and cosmeceuticals. While chromatographic and spectroscopic techniques have made bioactives analysis easier than before, their successful analysis depends on extraction techniques used. The book covers various emerging technologies for the extraction and characterization of bioactive compounds from seaweeds. The book provides in-depth information about the technique, its benefits and disadvantages, and potential industrial applications.

CRC Press

Market: Food & Culinary Science

November 2018: 6-1/8 x 9-1/4: 424pp

Hb: 978-1-138-19753-4: \$209.95

eBook: 978-1-315-27756-1

* For full contents and more information, visit: www.crcpress.com/9781138197534

Seaweed Bioactives

Health Benefits and Potential Applications

Edited by Amit K. Jaiswal, Dublin Institute of Technology, School of Food Science and Environmental Health, College of Sciences and Health, Ireland

Series: Nutraceuticals

Studies show seaweeds are valuable sources of structurally diverse bioactive compounds. These compounds exhibited various biological activities and beneficial health effects. This book focuses on four aspects of seaweeds research: bioactive compounds in seaweeds, their health benefits, effect of processing on seaweeds bioactive compounds and its biological properties, and potential applications in food and pharmaceutical industries. The book also discusses the impact of processing on bioactives, bioactivity, and bioavailability of the seaweeds upon processing and will present potential applications of the seaweeds bioactives as nutraceuticals, functional food ingredients and cosmeceuticals.

CRC Press

Market: Food & Culinary Science

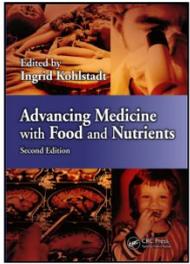
November 2018: 6-1/8 x 9-1/4: 520pp

Hb: 978-1-498-79698-9: \$249.95

eBook: 978-1-498-79699-6

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2nd Edition

Advancing Medicine with Food and Nutrients

Edited by **Ingrid Kohlstadt**, Johns Hopkins University, Baltimore, Maryland, USA

The first edition of this volume, entitled *Food and Nutrients in Disease Management* was praised for its practical, easy-to-use clinical applications presented by highly credentialed experts. This second edition reviews several new disorders as well as emerging themes uncovered by new research, including the body's increased demand for certain nutrients when faced with toxic exposures, food safety issues in patients with allergies and pre-existing medical conditions, and the effects of variables such as ultraviolet light, radiation, jetlag, and shift-work on nutritional needs. Organized conveniently based on specific medical

disorders, the book's chapters each conclude with a summary of clinical recommendations for the specific condition discussed.

CRC Press

Market: Nutrition

December 2012: 7 x 10: 910pp

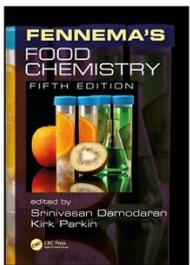
Hb: 978-1-439-88772-1: **\$175.00**

eBook: 978-1-439-88774-5

Prev. Ed Hb: 978-1-420-06762-0

* For full contents and more information, visit: www.crcpress.com/9781439887721

5th Edition

Fennema's Food Chemistry

Edited by **Srinivasan Damodaran**, University of Wisconsin, Madison, USA and **Kirk L. Parkin**, University of Wisconsin-Madison, USA

This latest edition of the most internationally respected reference in food chemistry for more than 30 years, *Fennema's Food Chemistry, 5th Edition* once again meets and surpasses the standards of quality and comprehensive information set by its predecessors. All chapters reflect recent scientific advances and, where appropriate, have expanded and evolved their focus to provide readers with the current state-of-the-science of chemistry for the food industry. This edition introduces new editors and contributors who are recognized experts in their

fields.

CRC Press

Market: Food & Culinary Science

March 2017: 7 x 10: 1107pp

Hb: 978-1-482-24361-1: **\$230.00**

Pb: 978-1-482-20812-2: **\$93.95**

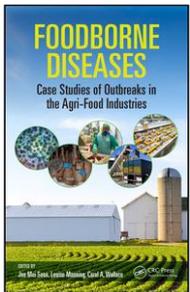
eBook: 978-1-482-20813-9

Prev. Ed Pb: 978-0-849-39272-6

* For full contents and more information, visit: www.crcpress.com/9781482208122

Foodborne Diseases

Case Studies of Outbreaks in the Agri-Food Industries



Edited by **Jan Mei Soon**, International Institute of Nutritional Sciences & Applied Food Safety Studies, University of Central Lancashire, Preston, UK, **Louise Manning**, Harper Adams University, Newport, Shropshire, UK and **Carol A. Wallace**, International Institute of Nutritional Sciences and Applied Food Safety Studies, University of Central Lancashire, UK

This book defines the context of foodborne disease across a range of food sectors. It provides insight into the causes and management of outbreaks along with practical lessons about foodborne disease prevention strategies relevant to stakeholders throughout the food supply chain. Individual chapters capture the epidemiological and traceback investigations of foodborne disease outbreaks from various food sectors—crops, meat, seafood, and wild game. Under each food category, case studies of real outbreaks are presented, along with lessons learned.

CRC Press

Market: Food Science

March 2016: 6-1/8 x 9-1/4: 418pp

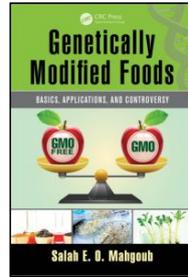
Hb: 978-1-482-20827-6: **\$250.00**

eBook: 978-1-482-20828-3

* For full contents and more information, visit: www.crcpress.com/9781482208276

Genetically Modified Foods

Basics, Applications, and Controversy



Edited by **Salah E. O. Mahgoub**, Kaplan University, Fort Lauderdale, Florida, USA

Genetically modified foods generally refer to crop plants created for human or animal consumption using molecular biology techniques. This book covers various aspects of GM foods including the basics and principles of how the production of GM foods developed through time and how it relates to other types of biotechnology; the applications of these principles at the lab and field levels, GM foods in the marketplace; the ongoing debate on GM foods production and consumption, consumer issues and trends, labeling and legal aspects of GM foods.

CRC Press

Market: Food & Culinary Science

June 2015: 6-1/8 x 9-1/4: 411pp

Hb: 978-1-482-24281-2: **\$175.00**

eBook: 978-1-482-24282-9

* For full contents and more information, visit: www.crcpress.com/9781482242812

Green Pesticides Handbook

Essential Oils for Pest Control



Edited by **Leo M.L. Nollet**, University College Ghent, Belgium (Retired) and **Hamid Singh Rathore**, Retired Professor and Chairman, Applied Chemistry Department, Aligarh Muslim University, India

Green pesticides, also called ecological pesticides, are pesticides derived from organic sources which are considered environmentally friendly and are causing less harm to human and animal health and to habitats and the ecosystem. Essential oils based insecticides started have amazing features. This book gives a full spectrum of the whole range of essential oil based pesticides that may be used in pest control. It discusses the uses and limitations, including the recent advances in this area. It

describes the metabolism and mode of action, and provides the present status of essential oil based pesticide residues in foodstuffs, soil and water.

CRC Press

Market: Environmental Science

May 2017: 7 x 10: 554pp

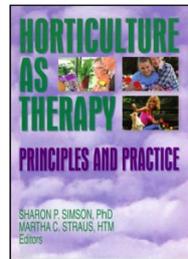
Hb: 978-1-498-75938-0: **\$239.95**

eBook: 978-1-498-75939-7

* For full contents and more information, visit: www.crcpress.com/9781498759380

Horticulture as Therapy

Principles and Practice



Edited by **Sharon Simson**, University of Maryland Center on Aging, College Park, MD, US and **Martha Straus**

Horticulture as Therapy is the first definitive, state-of-the-art text on the practice of horticulture as therapy. This unique book presents horticultural therapy as a medical discipline that uses plants and plant products to improve the cognitive, physical, psychological, or social functioning of its participants. In doing so, it educates future horticultural therapists in terms of concepts and skills and prepares them for professional positions as practitioners, researchers, and educators in this growing field.

CRC Press

June 2003: 6 x 9: 504pp

Hb: 978-1-560-22859-2: **\$140.00**

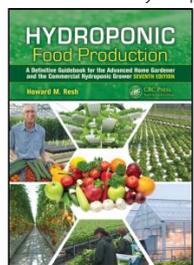
Pb: 978-1-560-22279-8: **\$71.95**

* For full contents and more information, visit: www.crcpress.com/9781560222798

7th Edition

Hydroponic Food Production

A Definitive Guidebook for the Advanced Home Gardener and the Commercial Hydroponic Grower, Seventh Edition



Howard M. Resh, CuisinArt Golf & Spa Hotel, Rendezvous Bay, Anguilla

This comprehensive, practical guide to soilless growing practices provides detailed information on how to design, set up, and operate hydroponic culture systems. Featuring 550 photographs, drawings, and tables, the seventh edition of this best-selling book has been extensively updated and expanded. The text describes the most successful growing cultures to use with specific crops and details media as well as hydroponic techniques. Chapters cover nutrient uptake and mixing as well as deficiencies and their symptoms, plant nutrition, nutrient solution, water culture, tropical hydroponics and special

applications, plant culture, nutrient film technique, gravel culture, and more.

CRC Press

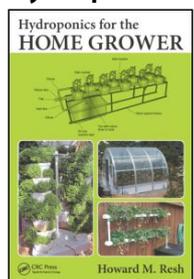
Market: Nutrition Science

August 2012: 7 x 10: 560pp

Hb: 978-1-439-87867-5: \$71.95

Pb: 978-1-439-87869-9

Prev. Ed Hb: 978-0-931-23199-5

* For full contents and more information, visit: www.crcpress.com/9781439878675**Hydroponics for the Home Grower**

Howard M. Resh, CuisinArt Golf & Spa Hotel, Rendezvous Bay, Anguilla

Hydroponics offers many advantages to traditional soil-based horticulture. These include greater control over many of the limiting factors such as light, temperature, and pests, as well as the ability to grow plants in all seasons. With instruction from one of the top recognized authorities worldwide, this book gives you step-by-step guidance on how to grow tomatoes, peppers, cucumbers, eggplants, lettuce, arugula, bok choy, and various herbs year-round within your home or in a backyard greenhouse. The book includes an appendix with sources of seeds and other supplies, along with helpful websites and other material on home-growing and caring for your crops.

CRC Press

Market: Agriculture

February 2015: 6-1/8 x 9-1/4: 352pp

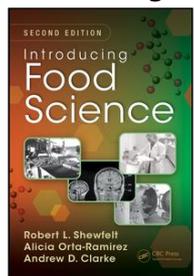
Hb: 978-1-138-40148-8: \$195.00

Pb: 978-1-482-23925-6: \$32.95

eBook: 978-1-482-23926-3

* For full contents and more information, visit: www.crcpress.com/9781482239256

2nd Edition · TEXTBOOK · READER

Introducing Food Science

Robert L. Shewfelt, University of Georgia, Athens, USA, Alicia Orta-Ramirez, Cornell University, Ithaca, New York, USA and Andrew D. Clarke, University of Missouri, Columbia, USA

The second edition of a bestseller, this textbook introduces the basics of food science, then building on this foundation, explores its sub-disciplines. This format has been retained to provide students with a well-rounded understanding of the field. The new edition contains revised or additional information on sustainability, molecular gastronomy, culinology, My Plate replacing My Pyramid, clean labels, the assault on processed foods and food scientists by several authors, the new food-safety regulations. It also provides additional pedagogical features, including end-of-chapter questions and a glossary while retaining the popular Looking Back, Remember This!, and Looking Ahead sections.

CRC Press

Market: Food Science

September 2015: 6-1/8 x 9-1/4: 437pp

Hb: 978-1-138-46043-0: \$195.00

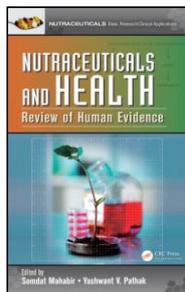
Pb: 978-1-482-20974-7: \$93.95

eBook: 978-1-482-20975-4

Prev. Ed Pb: 978-1-587-16028-8

* For full contents and more information, visit: www.crcpress.com/9781482209747**Nutraceuticals and Health**

Review of Human Evidence



Edited by Somdat Mahabir, National Cancer Institute, Bethesda, Maryland, USA and Yashwant V. Pathak, University of South Florida College of Pharmacy, USA

Series: Nutraceuticals

This book focuses on the role of nutraceuticals in human health, disease prevention, health promotion, and as an adjunct to disease treatment. This epidemiological focus is very crucial because it will address whether, and what kinds of, evidence exist to support a role for nutraceuticals in disease prevention and treatment. Cutting-edge summaries highlight both the biological and epidemiological findings of relevant studies of nutraceuticals in health and disease.

CRC Press

Market: Nutrition Science

April 2016: 6-1/8 x 9-1/4: 395pp

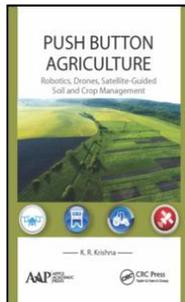
Hb: 978-1-466-51722-6: \$210.00

Pb: 978-1-138-19999-6: \$83.95

eBook: 978-1-466-51723-3

* For full contents and more information, visit: www.crcpress.com/9781466517233**Push Button Agriculture**

Robotics, Drones, Satellite-Guided Soil and Crop Management



K. R. Krishna

This book covers three main types of agricultural systems: the use of robotics, drones (unmanned aerial vehicles), and satellite-guided precision farming methods. Some of these are well refined and are currently in use, while others are in need of refinement and are yet to become popular. The book provides a valuable source of information on this developing field for those involved with agriculture and farming and agricultural engineering. The book is also applicable as a textbook for students and a reference for faculty.

Apple Academic Press

Market: Agriculture

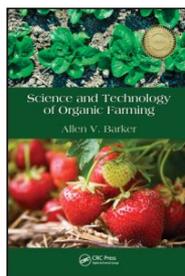
July 2016: 6 x 9: 470pp

Hb: 978-1-771-88304-7: \$180.00

eBook: 978-1-771-88305-4

* For full contents and more information, visit: www.crcpress.com/9781771883047

TEXTBOOK · READER

Science and Technology of Organic Farming

Allen V. Barker, University of Massachusetts, Amherst, USA

Discussing the science, technology, and philosophy of organic agriculture, this book addresses relevant issues and concepts along with practical applications. Chapters cover soil fertility and plant nutrition; individual plant requirements; liming; farm manures, green manures, and composts; mulching and tillage; and weed, insect, and disease control, as well as companion planting and storage. Accessible to undergraduate students in organic farming and gardening, and sustainable agriculture, the text includes a glossary with common technical and scientific terms used in conventional and organic agriculture.

CRC Press

Market: Agriculture

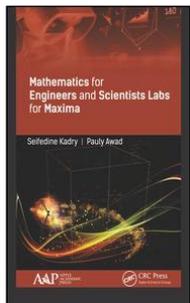
May 2010: 240pp

Hb: 978-1-439-81612-7: \$82.95

eBook: 978-1-439-88213-9

* For full contents and more information, visit: www.crcpress.com/9781439816127

Mathematics for Engineers and Scientists Labs for Maxima



Seifedine Kadry and Pauly Awad

This book is designed to be a vital companion to math textbooks covering the topics of pre-calculus, calculus, linear algebra, differential equations, and probability and statistics. It is unique in that it teaches how to solve these problems using Maxima open-source software, a system for the manipulation of symbolic and numerical expressions, including differentiation, integration, Taylor series, Laplace transforms, ordinary differential equations, and more. One of the benefits of using Maxima to solve mathematics problems is the immediacy with which it produces answers. Learning Maxima now will pay off for students and beginning professionals in mathematics, science, and engineering.

Apple Academic Press

Market: Mathematics

December 2018: 6-1/8 x 9-1/4: 304pp

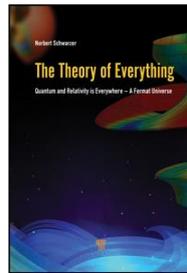
Hb: 978-1-771-88727-4: **\$149.95**

eBook: 978-0-429-46971-8

* For full contents and more information, visit: www.crcpress.com/9781771887274

The Theory of Everything

Quantum and Relativity is everywhere – A Fermat Universe



Norbert Schwarzer

The book unifies quantum theory and the general theory of relativity. As an unsolved problem for about 100 years and influencing so many fields. Examples like Higgs field, limit to classical Dirac and Klein–Gordon or Schrödinger cases, quantized Schwarzschild, Kerr, Kerr–Newman objects, and the photon are considered for illustration. An interesting explanation for the asymmetry of matter and antimatter in the early universe was found while quantizing the Schwarzschild metric. The proof of Fermat's last theorem can be brought down to a few lines by applying new quantum theoretical methods. Because such proof was sought for over 370 years, this book is of definite interest to mathematicians.

Pan Stanford

Market: Quantum Physics

November 2018: 6 x 9: 150pp

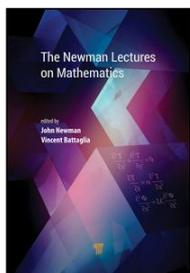
Hb: 978-9-814-77447-5: **\$49.95**

eBook: 978-1-315-09975-0

* For full contents and more information, visit: www.crcpress.com/9789814774475

TEXTBOOK · READER

The Newman Lectures on Mathematics



John Newman, University of California, Berkeley, USA and Vincent Battaglia, Lawrence Berkeley National Laboratory, Berkeley, CA, USA

This book shows a clean and concise way on how to use different analytical techniques to solve equations of multiple forms that one is likely to encounter in most engineering fields, especially chemical engineering. It provides the framework for formulating and solving problems in mass transport, fluid dynamics, reaction kinetics, and thermodynamics through ordinary and partial differential equations. The simplicity of the presentation instills confidence in the readers that they can solve any problem they come across either analytically or computationally.

Pan Stanford

Market: Engineering

May 2018: 6 x 9: 206pp

Hb: 978-9-814-77425-3: **\$49.95**

eBook: 978-1-315-10885-8

* For full contents and more information, visit: www.crcpress.com/9789814774253

2nd Edition · NEW EDITION

The Shroud of Turin

First Century after Christ! (Second Edition)

Giulio Fanti, Padua University, Padova, Italy and Pierandrea Malfi, Padua University, Padova, Italy

The Turin Shroud is the most important and studied relic in the world. Many papers on it have recently appeared in important scientific journals. Scientific studies on the relic until today have failed to provide conclusive answers about the identity of the enveloped man and the dynamics regarding the image formation impressed therein. This book not only addresses these issues in a scientific and objective manner but also leads the reader through new search paths. It summarizes the results in a simple manner for the reader to comprehend easily. Many books on the theme have been already published, but none of them contains such a large quantity of scientific news and reports.

Pan Stanford

Market: Mathematics

May 2019: 6 x 9: 500pp

Hb: 978-9-814-80008-2: **\$79.95**

eBook: 978-0-429-46812-4

Prev. Ed Hb: 978-9-814-66912-2

* For full contents and more information, visit: www.crcpress.com/9789814800082

TEXTBOOK · READER

Advanced Regression Models with SAS and R

Olga Korosteleva, California State University, Long Beach, USA

The material covered by this book consists of a collection of regression models beyond linear regression. The linear regression model is presented in the first chapter in order to refresh the reader's memory, emphasize certain points, and set the notation. The subsequent chapters talk about models for categorical data, count data, proportions, longitudinal data, hierarchical data, and others.

Chapman and Hall/CRC

Market: Statistics

December 2018: 6-1/8 x 9-1/4: 308pp

Hb: 978-1-138-04901-7: **\$99.95**

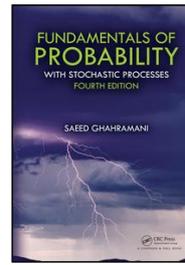
eBook: 978-1-315-16982-8

* For full contents and more information, visit: www.crcpress.com/9781138049017

4th Edition · TEXTBOOK · NEW EDITION

Fundamentals of Probability

With Stochastic Processes



Saeed Ghahramani, Western New England University, Springfield, Massachusetts, USA

The book covers all topics that are used in a calculus-based junior-senior probability course plus some additional material. With the extensive chapters in Stochastic Processes, it can also be used as a text for a second course in probability. The historical roots and applications of many of the theorems and definitions are presented in detail, accompanied by suitable examples or counterexamples.

Chapman and Hall/CRC

Market: Statistics

September 2018: 7 x 10: 632pp

Hb: 978-1-498-75509-2: **\$119.95**

eBook: 978-0-429-45795-1

Prev. Ed Hb: 978-1-498-75501-6

* For full contents and more information, visit: www.crcpress.com/9781498755092

2nd Edition · TEXTBOOK · READER

Applied Statistical Inference with MINITAB®, Second Edition

Sally A. Lesik, Central Connecticut State University, New Britain, USA

This book covers material that is typically presented in an intermediate course in statistics at the undergraduate level and a first course in applied statistics at the graduate level. Topics include basic statistical inference, regression, and ANOVA. More advanced topics include non-parametric statistics, logistic regression, and goodness-of-fit tests. One key feature of this book is that it is written to provide readers with the foundation necessary to study more advanced topics in statistics.

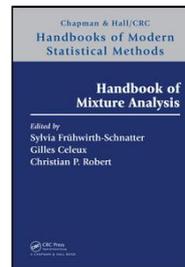
Chapman and Hall/CRC

November 2018: 7 x 10: 472pp

Hb: 978-1-498-77998-2: **\$129.95**

eBook: 978-0-429-44495-1

Prev. Ed Hb: 978-1-420-06583-1

* For full contents and more information, visit: www.crcpress.com/9781498779982**Handbook of Mixture Analysis**

Edited by Sylvia Fruhwirth-Schnatter, University of Vienna, Austria, Gilles Celeux, Universite Paris-Sud, France and Christian P. Robert, Universite Paris-Dauphine

Series: Chapman & Hall/CRC Handbooks of Modern Statistical Methods

Mixture analysis is very active research topic in statistics and machine learning. It is a good timing for a Handbook to present a broad overview of the methods and applications, suitable for graduate students and young researchers new to the field. This Handbook is divided into two main parts; the first part covers all the methods, with illustrative examples and guidance on computing where appropriate; and the second part includes

some more advanced methodological topics, and a series of case studies presenting applications of mixture analysis in a number of fields, including genomics, medicine, economics, finance and more.

Chapman and Hall/CRC

Market: Statistics

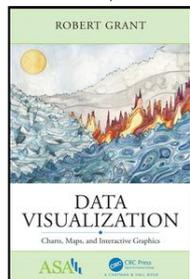
November 2018: 7 x 10: 536pp

Hb: 978-1-498-76381-3: **\$149.95**

eBook: 978-1-498-76382-0

* For full contents and more information, visit: www.crcpress.com/9781498763813**Data Visualization**

Charts, Maps, and Interactive Graphics



Robert Grant, Kingston University & St George's, University of London

Series: ASA-CRC Series on Statistical Reasoning in Science and Society

This is the age of data. There are more innovations and more opportunities for interesting work with data than ever before, but there is also an overwhelming amount of quantitative information being published every day. Data visualisation has become big business, because communication is the difference between success and failure, no matter how clever the analysis may have been. The ability to visualize data is now a skill in demand across business, government, NGOs and academia. ; *Data Visualization: Charts, Maps, and Interactive Graphics* gives

an overview of a wide range of techniques and challenges, while staying accessible to anyone interested in working with and understanding data.

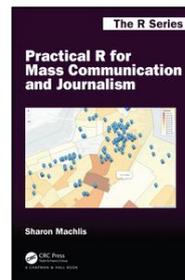
Chapman and Hall/CRC

Market: Statistics

October 2018: 5-1/2 x 8-1/2: 218pp

Hb: 978-1-138-55359-0: **\$99.95**Pb: 978-1-138-70760-3: **\$29.95**

eBook: 978-1-315-20135-1

* For full contents and more information, visit: www.crcpress.com/9781138707603**Practical R for Mass Communication and Journalism**

Sharon Machlis, IDG Communications, Inc.

Series: Chapman & Hall/CRC The R Series

People working in the media deal with data constantly. Journalists who are interested in improving their data skills will find this book useful. The book will concentrate on teaching R and will not go into statistical details. Data sets and projects chosen for the book are especially important in the journalism market.

Chapman and Hall/CRC

Market: Statistics

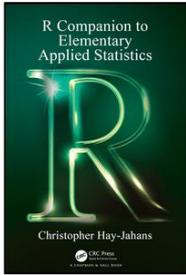
November 2018: 6-1/8 x 9-1/4: 288pp

Hb: 978-1-138-38635-8: **\$175.00**Pb: 978-1-138-72691-8: **\$59.95**

eBook: 978-1-315-19111-9

* For full contents and more information, visit: www.crcpress.com/9781138726918

R Companion to Elementary Applied Statistics



Christopher Hay-Jahans

This work presents content/techniques by progressively building upon earlier introduced ideas on using R as new ideas are introduced. It begins with basic tasks and computations with R. Then, readers are guided through ways to bring data into R, manipulate the data as needed, perform common statistical computations and elementary exploratory data analysis tasks, prepare customized graphics, and take advantage of R for a wide range of methods that find use in many elementary applications of statistics.

Chapman and Hall/CRC

Market: Statistics

October 2018: 6-1/8 x 9-1/4: 376pp

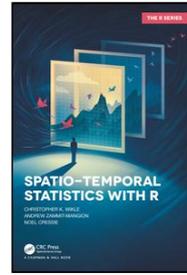
Hb: 978-1-138-32925-6: **\$189.95**

Pb: 978-1-138-32916-4: **\$69.95**

eBook: 978-0-429-44829-4

* For full contents and more information, visit: www.crcpress.com/9781138329164

Spatio-Temporal Statistics with R



Christopher Wikle, Andrew Zammit Mangion and Noel Cressie

Series: Chapman & Hall/CRC The R Series

The world is becoming increasingly complex, with larger quantities of data available to be analyzed. It so happens that much of these "big data" that are available are spatio-temporal in nature, meaning that they can be indexed by their spatial locations and time stamps. Spatio-Temporal Statistics with R provides an accessible introduction to statistical analysis of spatio-temporal data, with hands-on applications of the statistical methods using R Labs found at the end of each chapter. The book fills a void in the literature and available software, providing

a bridge for students and researchers alike who wish to learn the basics of spatio-temporal statistics.

Chapman and Hall/CRC

Market: Statistics

February 2019: 6-1/8 x 9-1/4: 392pp

Hb: 978-1-138-71113-6: **\$59.95**

eBook: 978-1-351-76972-3

* For full contents and more information, visit: www.crcpress.com/9781138711136

3rd Edition - NEW EDITION

R Graphics, Third Edition

Paul Murrell, The University of Auckland, New Zealand

Series: Chapman & Hall/CRC The R Series

This third edition of Paul Murrell's classic book on using R for graphics represents a major update, with a complete overhaul in focus and scope. It focuses primarily on the two core graphics packages in R - graphics and grid - and has a new section on integrating graphics. This section includes three new chapters on combining graphics systems and web graphics, focusing on importing graphics, integrating graphics, and advanced graphics. The emphasis in this third edition is on having the ability to produce detailed and customised graphics in a wide variety of formats, on being able to share and reuse those graphics, and on being able to integrate graphics from multiple systems.

Chapman and Hall/CRC

Market: Statistics

November 2018: 6-1/8 x 9-1/4: 423pp

Hb: 978-1-498-78905-9: **\$99.95**

eBook: 978-0-429-42276-8

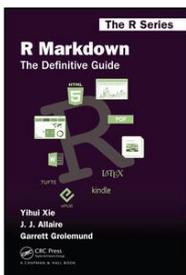
Prev. Ed Hb: 978-1-439-83176-2

* For full contents and more information, visit: www.crcpress.com/9781498789059

TEXTBOOK - READER

R Markdown

The Definitive Guide



Yihui Xie, RStudio, Inc. Boston, MA, USA, J.J. Allaire, RStudio and Garrett Grolemund

Series: Chapman & Hall/CRC The R Series

The markdown package has steadily evolved into a relatively complete ecosystem for authoring documents. This book provides a definitive guide to this ecosystem. There are a large number of tasks that you could do with R Markdown: compile a single R Markdown document to a report in different formats, such as PDF, HTML, or Word; create notebooks in which you can directly run code chunks interactively; make slides for presentations (HTML5 or LaTeX Beamer); produce dashboards with flexible, interactive, and attractive layouts; build interactive

applications based on Shiny; write journal articles; author books of multiple chapters; generate websites and blogs.

Chapman and Hall/CRC

Market: Statistics

July 2018: 6-1/8 x 9-1/4: 304pp

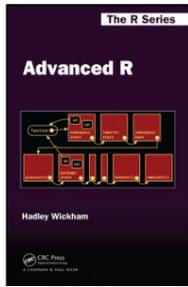
Hb: 978-1-138-35942-0: **\$87.95**

Pb: 978-1-138-35933-8: **\$34.95**

eBook: 978-1-138-35944-4

* For full contents and more information, visit: www.crcpress.com/9781138359338

Advanced R



Hadley Wickham, RStudio, Boston, Massachusetts
 Series: *Chapman & Hall/CRC The R Series*

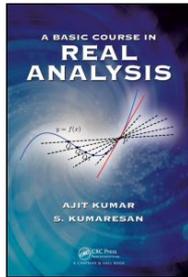
This practical book presents useful tools and techniques for attacking many types of R programming challenges, helping readers avoid mistakes and dead ends. With more than ten years of experience programming in R, the author shows how R is well tailored for data analysis and statistics. The book develops the necessary skills to produce quality code that can be used in a variety of circumstances. It covers the fundamentals of R, functional programming, metaprogramming, the basics of C++ and Rcpp, and more.

Chapman and Hall/CRC
Market: Statistics
 September 2014: 6 x 9: 476pp
 Hb: 978-1-138-46932-7: \$195.00
 Pb: 978-1-466-58696-3: \$62.95
 eBook: 978-1-466-58697-0

* For full contents and more information, visit: www.crcpress.com/9781466586963

TEXTBOOK · READER

A Basic Course in Real Analysis



Ajit Kumar, Institute of Chemical Technology, Mumbai, India and S. Kumaresan, School of Mathematics and Statistics, University of Hyderabad, Gachi Bowli, Hyderabad 500046, India

Although there are many books available on this subject, students often find it difficult to learn the essence of analysis on their own or after going through a course on real analysis. Written in a conversational tone, this text explains the hows and whys of real analysis and provides guidance that makes students think at every stage. It offers insight into how a typical mathematician works—observing patterns, conducting experiments, looking at or creating examples, understanding underlying principles, coming up with guesses or conjectures,

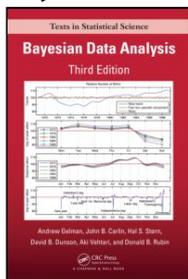
and rigorously proving them.

Chapman and Hall/CRC
Market: Statistics
 January 2014: 6-1/8 x 9-1/4: 322pp
 Hb: 978-1-482-21637-0: \$105.00
 eBook: 978-1-482-21638-7

* For full contents and more information, visit: www.crcpress.com/9781482216370

3rd Edition · TEXTBOOK

Bayesian Data Analysis



Andrew Gelman, Columbia University, New York, New York, USA, John B. Carlin, Royal Childrens Hospital, Parkville, Victoria, Australia, Hal S. Stern, University of California, Irvine, USA, David B. Dunson, Duke University, Durham, North Carolina, USA, Aki Vehtari, Aalto University, Finland and Donald B. Rubin, Harvard University, Cambridge, Massachusetts, USA

Series: *Chapman & Hall/CRC Texts in Statistical Science*
 Winner of the 2016 De Groot Prize from the International Society for Bayesian Analysis

Now in its third edition, this classic book continues to take an applied approach to analysis using up-to-date Bayesian methods.

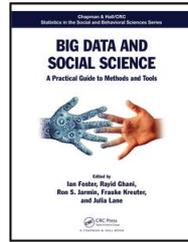
Along with new and revised software code, this edition includes four new chapters on nonparametric modeling, updates the discussion of cross-validation and predictive information criteria, and improves convergence monitoring and effective sample size calculations for iterative simulation. It also covers weakly informative priors, boundary-avoiding priors, Hamiltonian Monte Carlo, variational Bayes, and expectation propagation. Data sets and other materials are available online.

Chapman and Hall/CRC
Market: Statistics
 November 2013: 7 x 10: 675pp
 Hb: 978-1-439-84095-5: \$83.95
 eBook: 978-1-439-89820-8
 Prev. Ed Hb: 978-1-584-88388-3

TEXTBOOK · READER

Big Data and Social Science

A Practical Guide to Methods and Tools



Edited by Ian Foster, University of Chicago, Illinois, USA, Rayid Ghani, University of Chicago, Illinois, USA, Ron S. Jarmin, U.S. Census Bureau, USA, Frauke Kreuter, University of Maryland, USA; University of Mannheim, Germany; and Institute for Employment Research, Germany and Julia Lane, New York University; American Institutes for Research, USA
 Series: *Chapman & Hall/CRC Statistics in the Social and Behavioral Sciences*

This classroom-tested text shows how to integrate new ideas and methodologies about economic and social measurement into research and the workplace. It covers social science research principles as well as current analytic and computer tools. Grounded in the study of real-world social and economic problems, the book teaches students how to identify and capture the appropriate data, apply data science models and tools, and recognize associated errors and limitations from a social science perspective.

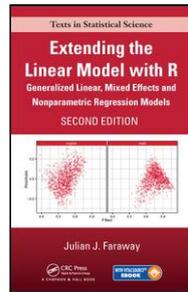
Chapman and Hall/CRC
Market: Statistics
 August 2016: 7-1/2 x 9-1/4: 356pp
 Hb: 978-1-498-75140-7: \$51.95
 eBook: 978-1-498-75142-1

* For full contents and more information, visit: www.crcpress.com/9781498751407

2nd Edition · TEXTBOOK · READER

Extending the Linear Model with R

Generalized Linear, Mixed Effects and Nonparametric Regression Models, Second Edition



Julian J. Faraway, University of Bath, UK

Series: *Chapman & Hall/CRC Texts in Statistical Science*

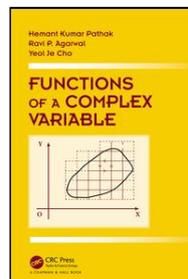
This second edition of a bestseller takes advantage of the greater functionality now available in R and substantially revises and adds several topics. It expands coverage of binary and binomial responses, incorporates many new sections, and adds a chapter on the Bayesian analysis of mixed effect models. It also revamps the R code throughout and updates the exercises, with solutions now included. The text explains data analysis using real examples and includes all the R commands necessary to reproduce the analyses.

Chapman and Hall/CRC
Market: Statistics
 March 2016: 6-1/8 x 9-1/4: 399pp
 eBook: 978-1-498-72098-4
 Pack - Book and Ebook: 978-1-498-72096-0: \$99.95

* For full contents and more information, visit: www.crcpress.com/9781498720960

TEXTBOOK · READER

Functions of a Complex Variable



Hemant Kumar Pathak, Pt. Ravishankar Shukla University, India, Ravi Agarwal, Texas A&M University-Kingsville, USA and Yeol Je Cho, Gyengsang National University, Jinju, South Korea

This text provides all the material for a course on the theory of functions of a complex variable at the senior undergraduate and beginning graduate level. Also suitable for self-study, the book covers every topic essential to training students in complex analysis. It also incorporates special topics to enhance students' understanding of the subject, laying the foundation for future studies in analysis, linear algebra, numerical analysis, geometry, number theory, physics, thermodynamics, or electrical engineering.

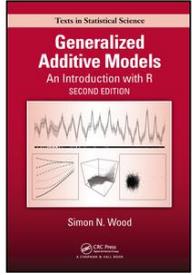
Chapman and Hall/CRC
Market: Mathematics
 November 2015: 6-1/8 x 9-1/4: 718pp
 Hb: 978-1-498-72015-1: \$130.00
 eBook: 978-1-498-72016-8

* For full contents and more information, visit: www.crcpress.com/9781498720151

2nd Edition · TEXTBOOK

Generalized Additive Models

An Introduction with R, Second Edition



Simon N. Wood

Series: *Chapman & Hall/CRC Texts in Statistical Science*

The first edition of this book has established itself as one of the leading references on generalized additive models (GAMs), and the only book on the topic to be introductory in nature with a wealth of practical examples and software implementation. It is self-contained, providing the necessary background in linear models, linear mixed models, and generalized linear models (GLMs), before presenting a balanced treatment of the theory and applications of GAMs and related models.

The author bases his approach on a framework of penalized regression splines, and while firmly focused on the practical

aspects of GAMs, discussions include fairly full explanations of the theory underlying the methods. Use of R software helps explain the theory and illustrates the practical application of the methodology. Each chapter contains an extensive set of exercises, with solutions in an appendix or in the book's R data package gamair, to enable use as a course text or for self-study.<

Chapman and Hall/CRC

Market: Statistics

May 2017: 6-1/8 x 9-1/4: 476pp

Hb: 978-1-498-72833-1: **\$89.95**

eBook: 978-1-498-72836-2

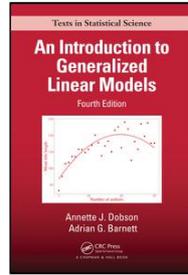
Prev. Ed Hb: 978-1-584-88474-3

* For full contents and more information, visit: www.crcpress.com/9781498728331



4th Edition · TEXTBOOK

An Introduction to Generalized Linear Models



Annette J. Dobson, University of Queensland, Herston, Australia and Adrian G. Barnett, Queensland University of Technology, Kelvin Grove, Australia

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This book provides a cohesive framework for statistical modelling, with an emphasis on numerical and graphical methods. This new edition of a bestseller has been updated with new sections on non-linear associations, strategies for model selection, and a Postface on good statistical practice.

Like its predecessor, it presents the theoretical background of generalized linear models (GLMs) before focusing on methods for analyzing particular kinds of data. It covers Normal, Poisson,

and Binomial distributions; linear regression models; classical estimation and model fitting methods; and frequentist methods of statistical inference. After forming this foundation, the authors explore multiple linear regression, analysis of variance (ANOVA), logistic regression, log-linear models, survival analysis, multilevel modeling, Bayesian models, and Markov chain Monte Carlo (MCMC) methods.

Chapman and Hall/CRC

Market: Statistics

April 2018: 6-1/8 x 9-1/4: 376pp

Hb: 978-1-138-74168-3: **\$200.00**

Pb: 978-1-138-74151-5: **\$79.95**

eBook: 978-1-315-18278-0

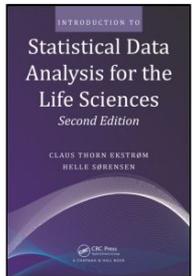
Prev. Ed Pb: 978-1-439-88919-0

* For full contents and more information, visit: www.crcpress.com/9781138741515



2nd Edition · TEXTBOOK · READER

Introduction to Statistical Data Analysis for the Life Sciences



Claus Thorn Ekstrom, University of Copenhagen, Denmark and Helle Sørensen, University of Copenhagen, Denmark

Using R throughout, this popular textbook presents the right balance of data examples, statistical theory, and computing to teach introductory statistics to students in the life sciences.

Expanded with over 100 more pages, this edition includes a new chapter on non-linear regression models and a new chapter that contains examples of complete data analyses. It also incorporates additional exercises in most chapters as well as a summary of statistical formulas related to the specific designs used to teach the statistical concepts.

Chapman and Hall/CRC

Market: Statistics

November 2014: 6-1/8 x 9-1/4: 526pp

Hb: 978-1-138-44574-1: **\$195.00**

Pb: 978-1-482-23893-8: **\$77.95**

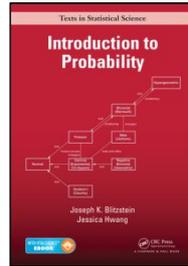
eBook: 978-1-482-23894-5

Prev. Ed Pb: 978-1-439-82555-6

* For full contents and more information, visit: www.crcpress.com/9781482238938

TEXTBOOK · READER

Introduction to Probability



Joseph K. Blitzstein, Harvard University, Cambridge, Massachusetts, USA and Jessica Hwang, Stanford University, California, USA

Series: *Chapman & Hall/CRC Texts in Statistical Science*

Assuming one semester of calculus, this textbook introduces probability to undergraduate students who want to learn statistics. It clearly explains the importance of widely used distributions in statistics, such as normal, binomial, and Poisson, and explores how they are all connected. The book makes the distributions easier to remember, understand, and work with by illustrating natural applications where they arise, including applications of MCMC. R is used to perform statistical calculations.

Chapman and Hall/CRC

Market: Statistics

July 2014: 7 x 10: 596pp

eBook: 978-1-466-57559-2

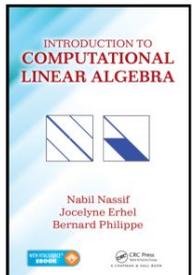
Pack - Book and Ebook: 978-1-466-57557-8: **\$107.00**

* For full contents and more information, visit: www.crcpress.com/9781466575578



TEXTBOOK · READER

Introduction to Computational Linear Algebra



Nabil Nassif, American University of Beirut, Lebanon, Jocelyne Erhel, INRIA, Rennes Cedex, France and Bernard Philippe, INRIA, Rennes, France

This text presents classroom-tested material on computational linear algebra and its application to numerical solutions of PDEs and ODEs. It covers the fundamentals needed in numerical linear algebra and describes many methods for solving a range of linear equations. The book expresses the numerical methods using pseudo-code or a detailed MATLAB program. Numerous exercises and computer projects test students' understanding of the mathematics of numerical methods and the art of computer programming.

Chapman and Hall/CRC

Market: Mathematics

June 2015: 6-1/8 x 9-1/4: 259pp

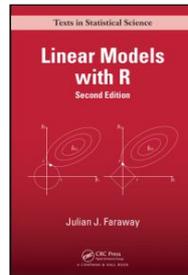
Hb: 978-1-482-25869-1: **\$91.95**

eBook: 978-1-482-25871-4

* For full contents and more information, visit: www.crcpress.com/9781482258691

2nd Edition · TEXTBOOK · READER

Linear Models with R



Julian J. Faraway, University of Bath, UK

Series: *Chapman & Hall/CRC Texts in Statistical Science*

Like its widely praised, best-selling predecessor, this second edition explains how to use linear models in physical science, engineering, social science, and business applications. The material on interpreting linear models now distinguishes the main applications of prediction and explanation and introduces elementary notions of causality. This edition also covers QR decomposition, splines, additive models, Lasso, multiple imputation, and false discovery rates. It extensively uses R's ggplot2 graphics package in addition to base graphics.

Chapman and Hall/CRC

Market: Statistics

July 2014: 6-1/8 x 9-1/4: 286pp

Hb: 978-1-439-88733-2: **\$96.00**

eBook: 978-1-439-88734-9

Prev. Ed Hb: 978-1-584-88425-5

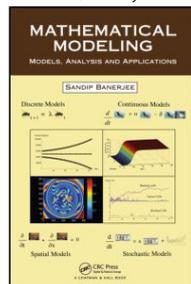
* For full contents and more information, visit: www.crcpress.com/9781439887332



TEXTBOOK · READER

Mathematical Modeling

Models, Analysis and Applications



Sandip Banerjee

This how-to guide presents tools for mathematical modeling and analysis. It offers a wide-ranging overview of mathematical ideas and techniques that provide a number of effective approaches to problem solving. Topics covered include spatial and stochastic modeling. The text provides real-life examples of discrete and continuous mathematical modeling scenarios.

MATLAB, *Mathematica*, and MatCont are incorporated throughout the text. The examples and exercises in each chapter can be used as problems in a project.

Chapman and Hall/CRC

Market: Engineering Mathematics

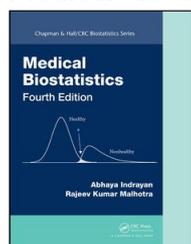
February 2014: 6-1/8 x 9-1/4: 276pp

Hb: 978-1-439-85451-8: \$105.00

eBook: 978-1-482-22916-5

* For full contents and more information, visit: www.crcpress.com/9781439854518

4th Edition

Medical Biostatistics

Abhaya Indrayan, Emeritus Professor of Biostatistics, Delhi University College of Medical Sciences, Delhi, India and Rajeev Kumar Malhotra, Department of Biostatistics and Medical Informatics, University College of Medical Sciences, Delhi, India

Series: *Chapman & Hall/CRC Biostatistics Series*

Encyclopedic in breadth, yet practical and concise, *Medical Biostatistics, Fourth Edition* focuses on the statistical aspects of medicine with a medical perspective, showing the utility of biostatistics as a tool to manage many medical uncertainties. This edition includes more topics in order to fill gaps in the

previous edition. Various topics have been enlarged and modified as per the new understanding of the subject.

Chapman and Hall/CRC

Market: Statistics

December 2017: 8-1/2 x 11: 720pp

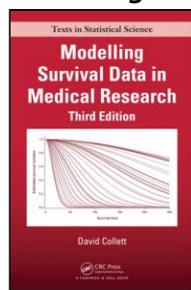
Hb: 978-1-498-79953-9: \$249.95

eBook: 978-1-315-10026-5

Prev. Ed Hb: 978-1-439-88414-0

* For full contents and more information, visit: www.crcpress.com/9781498799539

3rd Edition · TEXTBOOK · READER

Modelling Survival Data in Medical Research

David Collett, NHS Blood and Transplant, UK

Series: *Chapman & Hall/CRC Texts in Statistical Science*

Well known for its nontechnical style, this popular survival analysis textbook presents modern statistical techniques for handling survival data. This edition contains new chapters on frailty models and their applications, competing risks, non-proportional hazards, and dependent censoring. It also describes techniques for modelling the occurrence of multiple events and event history analysis. Earlier chapters are now expanded to include new material on a number of topics, including measures of predictive ability and flexible parametric models. Many new data sets and examples illustrate how all these techniques are used in modelling survival data.

Chapman and Hall/CRC

Market: Statistics

December 2014: 6-1/8 x 9-1/4: 548pp

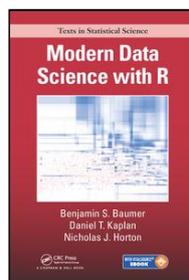
Hb: 978-1-439-85678-9: \$93.95

eBook: 978-1-498-73169-0

Prev. Ed Hb: 978-0-412-44880-5

* For full contents and more information, visit: www.crcpress.com/9781439856789

TEXTBOOK · READER

Modern Data Science with R

Benjamin S. Baumer, Smith College, Northhampton, Massachusetts, USA, Daniel T. Kaplan, Macalester College, Saint Paul, Minnesota, USA and Nicholas J. Horton, Amherst College, Massachusetts, USA

Series: *Chapman & Hall/CRC Texts in Statistical Science*

Contemporary data science uses both statistical modeling and computer programming to extract meaning from data. It requires a tight integration of knowledge from statistics, computer science, mathematics, and a domain of application. This book, which is intended for readers with some background in statistics and modest prior experience with coding, helps them develop and practice the appropriate skills to tackle complex data science

projects. Most of the examples are done in R, but SQL, Python, and other cutting-edge tools are discussed as well.

This site includes additional resources:

<http://mdsr-book.github.io/>

Chapman and Hall/CRC

Market: Statistics

February 2017: 7 x 10: 556pp

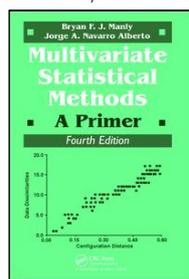
Pack - Book and Ebook: 978-1-498-72448-7: \$99.95

* For full contents and more information, visit: www.crcpress.com/9781498724487

4th Edition · TEXTBOOK · READER

Multivariate Statistical Methods

A Primer, Fourth Edition



Bryan F.J. Manly, University of Otago, Dunedin, New Zealand and Jorge A. Navarro Alberto, Universidad Autónoma de Yucatán, Mérida, México

Multivariate Statistical Methods: A Primer provides an introductory overview of multivariate methods without getting too deep into the mathematical details. This fourth edition is a revised and updated version of this bestselling introductory textbook. It retains the clear and concise style of the previous editions of the book and focuses on examples from biological and environmental sciences. The major update with this edition is that R code has been included for each of the analyses described, although in practice any standard statistical package can be used.

Chapman and Hall/CRC

Market: Statistics

November 2016: 6-1/8 x 9-1/4: 253pp

Hb: 978-1-138-46942-6: \$195.00

Pb: 978-1-498-72896-6: \$62.95

eBook: 978-1-315-38213-5

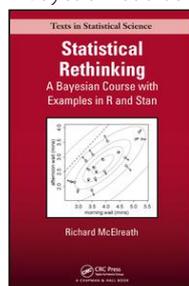
eBook: 978-1-498-72898-0

* For full contents and more information, visit: www.crcpress.com/9781315382135

TEXTBOOK · READER

Statistical Rethinking

A Bayesian Course with Examples in R and Stan



Richard McElreath, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This text builds readers' knowledge of and confidence in statistical modeling. Reflecting the need for even minor programming in today's model-based statistics, the book pushes readers to perform step-by-step calculations that are usually automated. This unique computational approach ensures that readers understand enough of the details to make reasonable choices and interpretations in their own modeling work. The book is accompanied by an R package that is available on the author's website and GitHub.

Chapman and Hall/CRC

Market: Statistics

December 2015: 7 x 10: 469pp

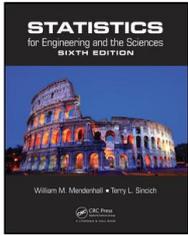
Hb: 978-1-482-25344-3: \$105.00

eBook: 978-1-482-25346-7

* For full contents and more information, visit: www.crcpress.com/9781482253443

6th Edition · TEXTBOOK

Statistics for Engineering and the Sciences



William M. Mendenhall and Terry L. Sincich

Designed for a two-semester introductory course, this popular text continues to teach students the basic concepts of data description and statistical inference as well as the statistical methods necessary for real-world applications. Along with updated and reorganized material, this sixth edition includes many new and updated exercises based on contemporary engineering and scientific-related studies and real data. It also offers more statistical software printouts and corresponding instructions for use that reflect the latest versions of the SAS, SPSS, and MINITAB software.

Chapman and Hall/CRC

Market: Statistics

December 2015; 8 x 10; 1166pp

Hb: 978-1-498-72885-0; \$125.00

eBook: 978-1-498-72887-4

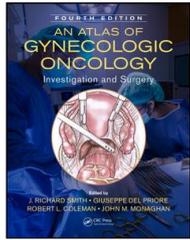
* For full contents and more information, visit: www.crcpress.com/9781498728850



4th Edition · NEW EDITION

An Atlas of Gynecologic Oncology

Investigation and Surgery, Fourth Edition



Edited by **J. Richard Smith**, Lister Hospital, London, UK, **Giuseppe Del Priore**, New York, Gyn Oncology, Flushing, USA, **Robert L. Coleman**, MD Anderson Cancer Center, University of Texas, Houston, USA and **John M. Monaghan**, University of Newcastle Upon Tyne, UK (Retired)

The latest edition of *An Atlas of Gynecologic Oncology* continues its coverage of the innovative techniques in investigation and surgery on the brink of becoming established as part of the gynecologic surgeon's repertoire, now including the exciting developments in uterine transplantation. The text is illustrated throughout in full color and contains the contributions of leading

international experts.

CRC Press

Market: Medicine

June 2018: 8-1/2 x 11: 347pp

Hb: 978-1-498-72906-2: **\$199.95**

eBook: 978-1-351-14168-0

eBook: 978-1-498-72907-9

* For full contents and more information, visit: www.crcpress.com/9781351141680**Case Studies in Pediatric Surgery**

Sherif Emil

This book targets pediatric surgical residents and fellows and complements the classic textbooks in the field by taking the knowledge base and applying it to practical clinical scenarios. The format replicates the typical clinical scenarios encountered by pediatric surgeons. A short synopsis of a case is presented, frequently with photographs. The reader then goes through a series of questions regarding further clinical information, appropriate imaging, management, and expectations on pathology, enabling the reader to work through the case.

CRC Press

Market: Medicine

February 2019: 7 x 10: 480pp

Hb: 978-1-498-71033-6: **\$159.95**

eBook: 978-1-498-71034-3

* For full contents and more information, visit: www.crcpress.com/9781498710336

TEXTBOOK · READER

Cases of a Hollywood Doctor

Edward Schwarz and Tomos Richards

It is established that learning based on interesting or novel methods makes information more memorable and improves retention. This book explores common medical presentations encountered during a medical student via vignettes that will bring to mind interesting and often humorous characters from literature, stage and screen. By attaching real pathology and clinical cases to characters with which the student can relate from their childhood and adult life, learning is made 'fun' without compromise to the clinical integrity of the content.

CRC Press

Market: Medicine

February 2019: 6 1/8 x 9: 208pp

Hb: 978-1-138-33291-1: **\$149.95**Pb: 978-1-138-33290-4: **\$29.95**

eBook: 978-0-429-44629-0

* For full contents and more information, visit: www.crcpress.com/9781138332904**Combating Burnout**

A Guide for Medical Students and Junior Doctors

Edited by **Adam Staten** and **Euan Lawson**

There is a growing body of evidence that highlights burnout as an increasing problem among medical students and junior doctors, with a lasting impact on those directly affected, on the wider workforce and the whole healthcare system. This practical aid, filled with 'down to earth' advice provides invaluable guidance on avoiding burnout, and on how to combat it should it occur. The book offers innovative ways to change working practices, building protective mechanisms into daily working life, and explores the diverse array of career options that are available to doctors to enable to junior doctors and students to see how they can build careers that are personally satisfying.

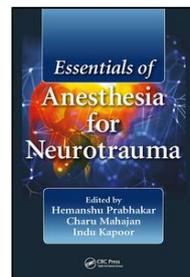
CRC Press

Market: Medicine

April 2019

Hb: 978-1-138-33136-5: **\$149.95**Pb: 978-1-138-33130-3: **\$24.95**

eBook: 978-0-429-44733-4

* For full contents and more information, visit: www.crcpress.com/9781138331303**Essentials of Anesthesia for Neurotrauma**

Edited by **Hemanshu Prabhakar**, **Charu Mahajan** and **Indu Kapoor**

This book aims to provide an overview of the basics of anesthesia for neurotrauma. It showcases how management of different neurotrauma cases may differ, especially those involving spine and or polytrauma. It provides quick and easy access to understand anesthesia for neurotrauma.

CRC Press

Market: Medicine

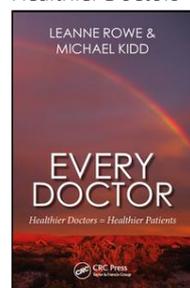
June 2018: 7 x 10: 626pp

Hb: 978-1-138-89507-2: **\$229.95**

eBook: 978-1-315-16674-2

* For full contents and more information, visit: www.crcpress.com/9781138895072**Every Doctor**

Healthier Doctors = Healthier Patients



Leanne Rowe and **Michael Kidd**

Series: *WONCA Family Medicine*

'Every Doctor' is about thriving in medicine at a time of massive advances and changes in global health systems and medical services.

The book is a must-read for doctors of all specialties at all stages of their careers wherever they practise in the world, because exemplary care of patients, peers, profession and self is a lifelong journey.

CRC Press

September 2018: 176pp

Hb: 978-1-138-49793-1: **\$62.95**Pb: 978-1-138-49785-6: **\$24.95**

eBook: 978-1-351-01747-3

* For full contents and more information, visit: www.crcpress.com/9781138497856

2nd Edition • TEXTBOOK • NEW EDITION

Handbook of Clinical Skills

Second Edition

Edited by **Peter Kopelman**, Principal of St George's University of London, UK and **Jane Dacre**, President of the Royal College of Physicians, London, UK

First published in 2002, this was one of the first handbooks to focus on the practical application of skills including consultation aimed specifically at medical students and newly-qualified juniors and is extremely well thought of, both in the UK and internationally. This long-awaited revision remains readable, concise and pocket-sized, while being thoroughly updated to reflect the latest requirements of these groups including consent, confidentiality and record keeping, with new chapters on Prescribing and Skills in general practice, procedures reflecting the latest Core Curriculum, and online video material to help students put their acquired skills into effective clinical practice.

CRC Press

Market: Medicine

December 2018: 360pp

Hb: 978-0-815-36696-6: **\$149.95**Pb: 978-0-815-36691-1: **\$34.95**

eBook: 978-1-351-25840-1

Prev. Ed Pb: 978-1-874-54557-6

* For full contents and more information, visit: www.crcpress.com/9780815366911**The History of Surgery**

Third Edition

Harold Ellis, Professor, Applied Clinical Anatomy Group, Applied Biomedical Research, Guy's Hospital London, UK and **Sala Abdalla**

Written in a personal and engaging style, by a medical author and teacher of great renown, this book provides a fascinating and informative introduction to the development of surgery through the ages. It describes the key advances in surgery through the ages, from primitive techniques such as trepanning, some of the gruesome but occasionally successful methods employed by the ancient civilisations, the increasingly sophisticated techniques of the Greeks and Romans, the advances of the Dark Ages and the Renaissance and on to the early pioneers of anaesthesia and antisepsis such as Morton, Lister and Pasteur.

CRC Press

Market: Medicine

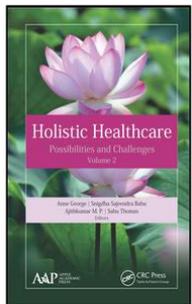
December 2018: 304pp

Hb: 978-1-138-61740-7: **\$159.95**Pb: 978-1-138-61739-1: **\$59.95**

eBook: 978-0-429-46174-3

* For full contents and more information, visit: www.crcpress.com/9781138617391**Holistic Healthcare**

Possibilities and Challenges Volume 2



Anne George, Snigdha S. Babu, Ajithkumar M. P and Sabu Thomas

This new book is a compilation of contributions from scientists, healthcare experts, and doctors working actively to bring about wholesome healing to individuals, looking at cutting-edge holistic therapies. The volume includes chapters that deal with improving the general health of people from various walks of life, to treating some very challenging diseases. Various schools of treatments, exercise regimes, and meditations are discussed. Specific topics include the use of alternative therapy for human health and healing, including yoga, meditation, acupuncture, prayer, herbs, Ayurvedic treatment, and homoeopathy.

Apple Academic Press

Market: Alternative Medicine

November 2018: 6-1/8 x 9-1/4: 305pp

Hb: 978-1-771-88715-1: **\$159.95**

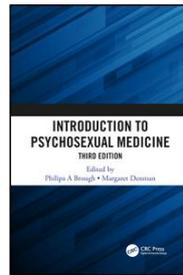
eBook: 978-0-429-48780-4

* For full contents and more information, visit: www.crcpress.com/9781771887151

3rd Edition • NEW EDITION

Introduction to Psychosexual Medicine

Third Edition



Edited by **Philipa A. Brough** and **Margaret Denman**

This authoritative text for those training in Sexual Medicine now returns in a new edition that builds on what clinicians found most useful in the previous editions - physical and psychological background knowledge and all relevant treatments, combined with psychological therapies, principles, and case examples applied to common problems.

CRC Press

Market: Medicine

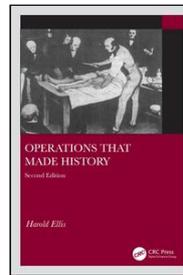
March 2019: 7 x 10: 248pp

Pb: 978-1-138-09578-6: **\$59.95**

Prev. Ed Pb: 978-0-340-76142-7

* For full contents and more information, visit: www.crcpress.com/9781138095786

2nd Edition • NEW EDITION

Operations that made History 2e

Harold Ellis, King's College London Guy's Campus, UK

A notable surgeon and charismatic teacher himself, Professor Ellis has brought together in *Operations that made History* a fascinating collection of renowned surgical procedures each one illustrating a different aspect of the history of surgery.

CRC Press

Market: Medicine

October 2018: 156pp

Hb: 978-0-367-00155-1: **\$149.95**Pb: 978-1-138-33431-1: **\$39.99**

eBook: 978-0-429-43428-0

* For full contents and more information, visit: www.crcpress.com/9781138334311**Pocket Guide to Bacterial Infections**Edited by **K Balamurugan***Series: Pocket Guides to Biomedical Sciences*

Pocket Guide to Bacterial Infections provides information pertinent to the behaviour of bacterial cells during their interactions with different cell types of multiple host systems. This book will present the role of various bacterial pathogens affecting the host system. The book is to be organized flexibly so that chapters and topics are arranged with continuity from the former chapters. Each chapter has been made as self-contained as possible to promote this flexibility. This book will discuss each of the virulence properties of the bacteria with reference to their interacting hosts in a larger perspective.

CRC Press

Market: Medicine

February 2019: 5-1/4 x 8: 272pp

Hb: 978-1-138-05491-2: **\$149.95**Pb: 978-1-138-05489-9: **\$39.95**

eBook: 978-1-315-16637-7

* For full contents and more information, visit: www.crcpress.com/9781138054899

Video Reflexive Ethnography in Health Research and Healthcare Improvement

Theory and Application

Rick Iedema, Katherine Carroll, Australian National University, Australia, Aileen Collier, Su-Yin Hor, Jessica Mesman and Mary Wyer

This innovative, practical guide introduces researchers to the use of the video reflexive ethnography in health and health services research. This methodology has enjoyed increasing popularity among researchers internationally and has been inspired by developments across a range of disciplines: ethnography, visual and applied anthropology, medical sociology, health services research, medical and nursing education, adult education, community development, and qualitative research ethics.

CRC Press

Market: Medicine

December 2018: 212pp

Hb: 978-0-815-37035-2: **\$124.95**

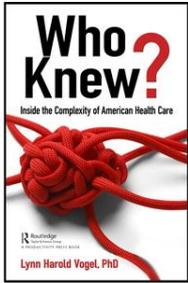
Pb: 978-0-815-37033-8: **\$49.95**

eBook: 978-1-351-24801-3

* For full contents and more information, visit: www.crcpress.com/9780815370338

Who Knew?

Inside the Complexity of American Health Care



Lynn H. Vogel

This book written by a well know industry 'insider' with 35+ years working at senior levels in hospital operations and information technology, discusses nine major factors that in combination contribute to health care's complexity. The author concludes that until we understand why health is so complex, we will continue to see books complaining about the poor state of health care in the U.S., and proposals for change that are generally unsuccessful, and innovative technology products that fail to deliver expected results.

Productivity Press

Market: Business & Management

November 2018: 6-1/8 x 9-1/4: 220pp

Hb: 978-1-138-35302-2: **\$29.95**

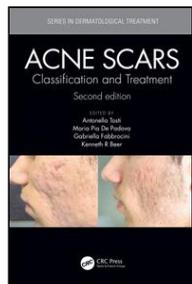
eBook: 978-0-429-43442-6

* For full contents and more information, visit: www.crcpress.com/9781138353022

2nd Edition · NEW EDITION

Acne Scars

Classification and Treatment, Second Edition



Edited by **Antonella Tosti**, **Maria Pia De Padova**, Ospedale Privato Nigrisoli, Bologna, Italy, **Gabriella Fabbrocini**, University of Naples Federico II, Department of Clinical Medicine and Surgery and **Kenneth R Beer**, Cosmetic Bootcamp, West Palm Beach, Florida, USA

Series: Series in Dermatological Treatment

Visible scarring may be a daily reminder of disease long after active acne has subsided. Frequently, it is a cause of distress for the patient and a leading cause for visiting medical professionals. This updated and expanded edition of an acclaimed pioneering text will be invaluable for both general and cosmetic dermatologists, plastic surgeons, and primary care physicians with a specialist interest in the skin as an invaluable guide

through the complexities of treatment.

CRC Press

Market: Medicine

November 2018: 7 x 10: 192pp

Hb: 978-1-138-89422-8: **\$119.95**

Prev. Ed Hb: 978-1-841-84687-3

* For full contents and more information, visit: www.crcpress.com/9781138894228

Assessing Competence in Medicine and Other Health Professions

Claudio Violato, Wake Forest School of Medicine, Winston-Salem, North Carolina, USA

This comprehensive, yet accessible, text demystifies the challenging area of competence assessment in medicine and the health sciences, providing a clear framework and the tools for anyone working or studying in this area. Written by a single, highly experienced, author, the content benefits from uniformity of style and is supported and enhanced by a range of pedagogic features including cases, questions and summaries. Essential reading for all students and practitioners of medical education, it will also be an invaluable guide for allied health professionals and psychologists with a general interest in assessment, evaluation and measurement and a useful library reference.

CRC Press

Market: Medicine

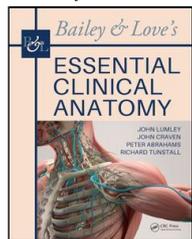
November 2018: 6-1/8 x 9-1/4: 368pp

Hb: 978-1-138-59634-4: **\$149.95**

Pb: 978-1-498-78508-2: **\$59.95**

eBook: 978-1-498-78509-9

* For full contents and more information, visit: www.crcpress.com/9781498785082

Bailey & Love's Essential Clinical Anatomy

John S. P. Lumley, Emeritus Professor of Vascular Surgery, University of London; Past Council Member and Chairman of Primary Fellowship Examinations, Royal College of Surgeons of England, UK, **John L. Craven**, MD FRCS Formerly Consultant Surgeon, York District Hospital and Past Chairman of the Primary Examiners of the Royal College of Surgeons of England, UK, **Peter H. Abrahams**, Warwick Medical School, Coventry, UK and **Richard G. Tunstall**, Medical Teaching Centre, University of Warwick, Coventry, UK

This essential companion to Bailey & Love's Short Practice of Surgery covers the clinical conditions most commonly

encountered by medical students, junior clinicians, and surgeons in training.

CRC Press

Market: Medicine

November 2018: 8-1/2 x 11: 472pp

Hb: 978-1-138-29523-0: **\$149.95**

Pb: 978-1-138-29518-6: **\$49.95**

* For full contents and more information, visit: www.crcpress.com/9781138295186

2nd Edition · NEW EDITION

Cardiac Catheterisation and Interventional Cardiology

The Essential Guide, Second Edition

Edited by **John Edward Boland** and **David W. M. Muller**, St Vincent's Hospital, Victoria St, Darlinghurst, NSW 2010, Australia

Completely revised and updated, this book is intended to demystify many difficult topics in cardiology and cardiac catheterization, from the basics of laboratory instrumentation and technology to a comprehensive review of new and established interventions.

CRC Press

Market: Medicine

March 2019: 8-1/2 x 11: 420pp

Hb: 978-1-138-48151-0: **\$79.95**

Prev. Ed Hb: 978-9-058-23131-4

* For full contents and more information, visit: www.crcpress.com/9781138481510

Core Conditions for Medical and Surgical Finals, First Edition**Kristen Davies**

This concise revision guide delivers the must-know facts and associations for the common conditions that are most likely to be tested during medical school finals across medicine, surgery and the specialties. Presented in a convenient double-page spread format and systematically structured throughout it is ideal for rapid reference

CRC Press

Market: Medicine

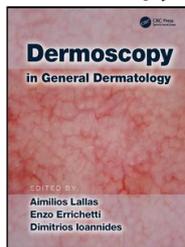
April 2019: 8-1/2 x 11

Hb: 978-1-138-33118-1: **\$149.95**

Pb: 978-1-138-33103-7: **\$29.95**

eBook: 978-0-429-44743-3

* For full contents and more information, visit: www.crcpress.com/9781138331037

Dermoscopy in General Dermatology

Edited by **Aimilios Lallas**, **Enzo Errichetti** and **Dimitrios Ioannides**

Dermoscopy is now well established as a frontline resource for dermatologists in performing skin cancer screening, so applying dermoscopy as a basic clinical tool in the evaluation of other conditions also was a natural evolution. The dermoscopic patterns of numerous dermatologic diseases have now been investigated and disseminated; this book collects the results, to help all those who want to improve their skills as clinicians and acquire additional knowledge on the submicroscopic morphology of skin diseases.

CRC Press

Market: Medicine

October 2018: 8-1/2 x 11: 380pp

Hb: 978-1-138-70656-9: **\$199.95**

eBook: 978-1-315-20173-3

* For full contents and more information, visit: www.crcpress.com/9781138706569

2nd Edition · NEW EDITION

Diagnostic Endometrial Pathology 2E

Yee Khong, Department of Anatomical Pathology, Women's and Children's Hospital, 72 King William Road, North Adelaide, SA 5006, Australia, Annie NY Cheung, Department of Pathology, The University of Hong Kong, Room 322, 3/F University Pathology Building, Queen Mary Hospital, Pokfulam, Hong Kong and Wenxin Zheng

Endometrial cancer remains the most frequent gynaecological cancer in first world countries. This bench book on endometrial pathology distils the current literature to provide a practical text on endometrial pathology. Differential diagnosis is emphasised, and the clinical correlates of pathology are also stressed to make this a clinically useful book. Fully updated and including over 400 colour images, this book provides a valuable resource for the practising pathologist in general and community hospitals as well as in teaching hospitals.

CRC Press

Market: Medicine

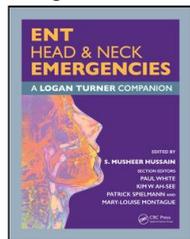
February 2019: 8-1/2 x 11: 179pp

Hb: 978-1-138-62641-6: \$159.00

Prev. Ed Hb: 978-1-841-84367-4

* For full contents and more information, visit: www.crcpress.com/9781138626416**ENT, Head & Neck Emergencies**

A Logan Turner Companion



Edited by S Musheer Hussain

ENT emergencies are a regular occurrence. This new book covers the full range of hospital emergencies seen by ENT trainees and practitioners, and also by oral and maxillofacial surgeons and plastic surgeons. Succinct text and clear illustrations complement the sections on Rhinology, Head and Neck, Otolaryngology and Paediatrics. Practical and up to date, this book facilitates excellence in clinical practice.

CRC Press

Market: Medicine

November 2018: 266pp

Hb: 978-1-138-61653-0: \$162.95

Pb: 978-1-138-62642-3: \$64.95

* For full contents and more information, visit: www.crcpress.com/9781138626423**Handbook of Aviation and Space Medicine**

First Edition

Edited by Nicholas Green, Steven J. Gaydos, Ewan J. Hutchison and Ed Nicol

This highly practical guide is ideal for any medical professional who deals with patients in the aerospace environment or is involved in the healthcare of aircrew or individuals preparing for or returning from aerospace travel. The book covers all the main aspects of aerospace medicine, in note form for rapid assimilation in the clinical setting, including the salient physiology and clinical aspects of aerospace medicine and makes plentiful use of figures, algorithms and tables, complemented throughout by clinical cases.

CRC Press

Market: Medicine

January 2019: 6 1/7 x 9 1/5: 400pp

Hb: 978-1-138-61787-2: \$174.95

Pb: 978-1-138-61786-5: \$69.95

eBook: 978-0-429-02165-7

* For full contents and more information, visit: www.crcpress.com/9781138617865

5th Edition · TEXTBOOK · NEW EDITION

Human Molecular Genetics

Tom Strachan, Newcastle University, UK and Andrew Read, University of Manchester, UK

Human Molecular Genetics is an established title that provides an authoritative and integrated approach to the molecular aspects of human genetics. While maintaining the hallmark features of previous editions, the Fifth Edition has been completely updated, so to provide the reader with current developments in the field. The text has been restructured and divided into five sections, to make it even easier to navigate.

New Key Concepts at the beginning of each chapter and annotated further reading at the conclusion of each chapter will help readers navigate the wealth of information in this subject. High-quality artwork is found throughout the book, illustrating the key concepts and mechanisms. A class-proven textbook for upper-level undergraduates and graduate students, *Human Molecular Genetics* is a go-to book for those studying human molecular genetics or genomics courses.

Garland Science

Market: Genetics

December 2018: 850pp

Hb: 978-0-367-00250-3: \$324.95

Pb: 978-0-815-34589-3: \$129.95

eBook: 978-0-429-44836-2

* For full contents and more information, visit:

www.garlandscience.com/product/isbn/9780367002503**Immunology**

An Introductory Textbook

Edited by Anil Sharma

Immunology has emerged as a key component of the curricula of graduate and postgraduate courses in biotechnology, microbiology, biochemistry, bioinformatics, and other interdisciplinary fields of biology, including zoology, veterinary science, and medicine. The book contains the most recent information about immunologic mechanisms and their importance, along with various molecular techniques employed in immunology. The short and concise text helps make the structures, processes, and interactions of the immune system as easily comprehensible to readers as possible.

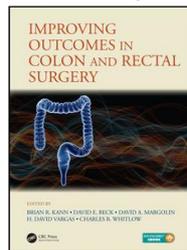
Pan Stanford

Market: Immunology

October 2018: 6 x 9: 350pp

Hb: 978-9-814-77451-2: \$149.95

eBook: 978-1-315-15063-5

* For full contents and more information, visit: www.crcpress.com/9789814774512**Improving Outcomes in Colon & Rectal Surgery**

Edited by Brian R. Kann, Ochsner Medical Center, Dept of Colon & Rectal Surgery, New Orleans, USA, David E. Beck, Ochsner Clinic Foundation, New Orleans, USA, David A. Margolin, Ochsner Clinic Foundation, New Orleans, USA, H. David Vargas, Ochsner Clinic Foundation, New Orleans, USA and Charles B. Whitlow

This evidence based book provides a modern resource for improving outcomes in colorectal surgery. The occurrence or mismanagement of complications often results in poor outcomes, increased cost, and significant morbidity. Answering the call for transparency and improvement requires action and

co-operation by all involved in the care of patients.

CRC Press

Market: Medicine

October 2018: 8-1/2 x 11: 424pp

Pack - Book and Ebook: 978-1-138-62683-6: \$199.95

* For full contents and more information, visit: www.crcpress.com/9781138626836

3rd Edition - NEW EDITION

Medical Management of Thyroid Disease, Third Edition

Edited by **David S. Cooper**, Johns Hopkins University, Baltimore and **Jennifer Sipos**, The Ohio State University, Columbus

The Third Edition of Medical Management of Thyroid Disease provides the most up-to-date practical guidance for the diagnosis and management of common and uncommon thyroid diseases. It reflects the advancement in guidelines and research for thyroid cancer, nodules and hypothyroidism; all presented in an accessible format with more illustrations and algorithms for management.

CRC Press

Market: Medicine

December 2018: 7 x 10: 302pp

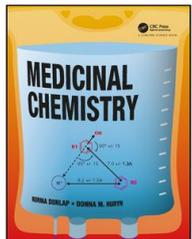
Hb: 978-1-138-57723-7: **\$159.95**

Prev. Ed Hb: 978-1-420-07064-4

* For full contents and more information, visit: www.crcpress.com/9781138577237

TEXTBOOK

Medicinal Chemistry



Norma K Dunlap, Middle Tennessee State University, USA and **Donna M Huryn**, University of Pennsylvania and University of Pittsburgh, USA

Medicinal Chemistry teaches the essential concepts of medicinal chemistry from the perspective of practicing chemists, starting with a synthetic organic chemistry and structural biology foundation and interweaving coverage of therapeutics, case studies, historical context, and modern techniques. Each chapter features a Journal Club, as well as review and application questions to enhance and test comprehension. This textbook is ideal for upper-level undergraduates and graduate students

taking a one-semester survey course on medicinal chemistry and/or drug discovery, as well as scientists entering the pharmaceutical industry.

Garland Science

Market: Chemistry

April 2018: 8 3/8 x 10 7/8: 496pp

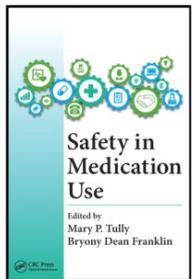
Pb: 978-0-815-34556-5: **\$115.00**

eBook: 978-1-315-10047-0

* For full contents and more information, visit:

www.garlandscience.com/product/isbn/9780815345565

Safety in Medication Use



Edited by **Mary Patricia Tully**, Manchester Pharmacy School, University of Manchester, UK and **Bryony Dean Franklin**, Imperial College Healthcare NHS Trust, UCL School of Pharmacy, London, UK

An estimated 1 in 20 patients are admitted to the hospital due to problems with their medication and 1 in 100 hospitalized patients are harmed due to medication errors during their stay. This book provides an overview of the theory and practice of medication safety, summarizing the international literature and practical suggestions for local practice. It covers three broad areas: problems in the medication use process, approaches to understanding and resolving them, and putting solutions into practice. This book describes an international body of work that

shows not only how widespread medication errors are, but also discusses interventions that can reduce them to improve patient safety.

CRC Press

Market: Biomedical Science

August 2015: 6-1/8 x 9-1/4: 340pp

Hb: 978-1-138-45727-0: **\$195.00**Pb: 978-1-482-22700-0: **\$83.95**

eBook: 978-1-482-22701-7

* For full contents and more information, visit: www.crcpress.com/9781482227000

Musculoskeletal Injections and Alternative Options

A practical guide to 'what, when, and how?'

Edited by **Maneesh Bhatia**, University Hospitals Leicester, Gewndolen Road, Leicester, Leicestershire, LE5 4PW, UK

Musculoskeletal injections for joint or tendon problems are performed commonly and their use is on the rise. Although traditionally done in the hospital setting, many general practitioners now offer this ambulatory procedure. These injections are also being done by extended scope practitioners (ESP). With proper indication and application technique the steroid injections can result in marked improvement in acute symptoms as well as delay or postpone surgery. This book helps primary care physicians and ESPs understand the indications and local anatomy to safely perform injections with complication avoidance. The content is supported by current evidence, guidelines, and companion videos.

CRC Press

Market: Medicine

January 2019: 248pp

Pack - Book and Ebook: 978-0-815-35554-0: **\$39.95*** For full contents and more information, visit: www.crcpress.com/9780815355540

Nail Disorders

A Comprehensive Approach

Edited by **Archana Singal**, **Shekhar Neema** and **Piyush Kumar**

This book aims to provide a comprehensive review covering the diagnostic and therapeutic aspects of nail disorders. It discusses the basics of nail unit, common conditions like infections, tumors and genetic diseases, diagnostic armamentarium involved in nail diseases which includes anesthesia of nail unit and nail biopsy.

CRC Press

Market: Medicine

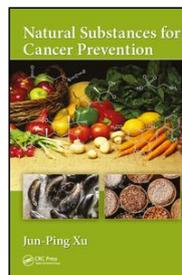
February 2019: 8-1/2 x 11: 434pp

Hb: 978-0-815-37834-1: **\$99.95**

eBook: 978-1-351-13972-4

* For full contents and more information, visit: www.crcpress.com/9780815378341

Natural Substances for Cancer Prevention



Jun-Ping Xu, School of Molecular Science, Arizona State University

Natural Substances for Cancer Prevention explores in detail how numerous investigations in chemical biology and molecular biology have established strong scientific evidence demonstrating how the properties of naturally occurring bioactive chemicals hamper all stages of cancers (from initiation to metastasis).

Accordingly, important goals for cancer prevention are the modification of our dietary habits and an increase in the intake of more anticancer-related natural substances. More significantly, the bioactive chemicals presented in the functional foods should

be readily available, inexpensive, non-toxic, and nutritional.

CRC Press

Market: Chemistry

February 2018: 7 x 10: 492pp

Hb: 978-0-815-36538-9: **\$259.95**

eBook: 978-1-351-26100-5

* For full contents and more information, visit: www.crcpress.com/9780815365389

3rd Edition · NEW EDITION

Oncoplastic and Reconstructive Surgery of the Breast, Third Edition

Edited by **Steven J. Kronowitz, MD, FACS**, John Russell Benson, Addenbrooke's Hospital, Cambridge, UK and **Maurizio Bruno Nava**, Istituto Nazionale Tumori, Milan, Italy

Building on the success of previous editions, a comprehensive and contemporary account of techniques in oncoplastic and reconstructive breast surgery is described and illustrated. Presenting a detailed description of implant design and technology with accounts of implant-only-based and autologous tissue reconstruction. Emphasis is placed on patient selection, which is critical for optimum cosmetic and functional results. Further topics include psychological issues, patient expectation, specific contraindications to reconstruction and chronic pain following surgery.

CRC Press

Market: Medicine

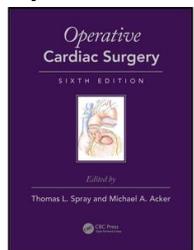
January 2019: 8-1/2 x 11: 440pp

eBook: 978-1-315-11389-0

Pack - Book and Ebook: 978-1-498-74071-5: **\$219.95*** For full contents and more information, visit: www.crcpress.com/9781498740715

6th Edition · NEW EDITION

Operative Cardiac Surgery



Edited by **Thomas L. Spray**, The Children's Hospital of Philadelphia, PA, USA and **Michael A. Acker**, University of Pennsylvania, School of Medicine, Division of Cardiothoracic Surgery

Series: *Rob & Smith's Operative Surgery Series*

The sixth edition of this acclaimed and established operative atlas continues to provide a unique level of comprehensive detail on operative surgery of the heart and great vessels. With an international list of authors, the chapters have been updated and complemented by the same high quality artwork that has established this operative guide as the gold standard reference

for the cardiac surgeon. New chapters have been added on the latest techniques such as minimal invasive surgery, robotic surgery and off-pump bypass surgery.

CRC Press

Market: Surgery

November 2018: 8-1/2 x 11: 800pp

eBook: 978-1-351-17597-5

Pack - Book and Ebook: 978-1-444-13758-3: **\$359.95*** For full contents and more information, visit: www.crcpress.com/9781444137583

Operative Endoscopic and Minimally Invasive Surgery

Edited by **Daniel B. Jones**, Harvard Medical School, Boston, Massachusetts, USA and **Steven Schwaitzberg, M.D.**, Harvard Medical School, Boston, Massachusetts, USA

This is a new reference edited by two leading authorities in the field of minimally invasive surgery that differentiates itself from other similar titles by providing a stronger emphasis on incorporating newer technologies. The book discussed the incorporation of flexible endoscopy into surgical practice, harvesting the expertise of gastroenterologists and surgical endoscopists. It also discusses minimally invasive operative procedures such as laparoscopically assisted vaginal hysterectomy.

CRC Press

Market: Medicine

December 2018: 8-1/2 x 11: 720pp

eBook: 978-0-429-42636-0

Pack - Book and Ebook: 978-1-498-70830-2: **\$279.95*** For full contents and more information, visit: www.crcpress.com/9781498708302

2nd Edition · NEW EDITION

Pediatric Emergency Medicine

Illustrated Clinical Cases, Second Edition

Edited by **Alisa McQueen**, Comer Children's Hospital at the University of Chicago, Illinois, USA and **S. Margaret Paik**

Series: *Illustrated Clinical Cases*

This book includes 200 clinical cases which present as emergencies. Congenital and acquired conditions affecting all body systems in infants and children are covered, including allergy, abuse, burns, fractures and other trauma, feeding problems, foreign bodies, genetic disorders, infections, poisoning, haematology, oncology, and much more. Cases appear in random order, reflecting actual practice in emergency medicine, and reinforcing skills in investigation, diagnosis, and treatment. It is superbly illustrated with high-quality radiographic images and photographs and is indispensable for all health professionals dealing with emergencies involving children.

CRC Press

Market: Medicine

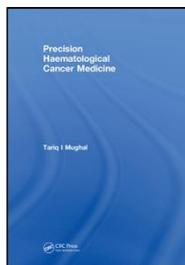
August 2018: 6.8 x 9.6: 434pp

Hb: 978-1-138-34649-9: **\$99.95**

eBook: 978-1-482-23032-1

* For full contents and more information, visit: www.crcpress.com/9781138346499

Precision Haematological Cancer Medicine



Edited by **Tariq Mughal**, Tufts University Medical Center, Boston, Massachusetts, USA, Kings College NHS Foundation Trust, London, and University of Buckingham Medical School, UK

Many experts now consider genetic evaluation to be pivotal for the optimal diagnosis, classification, risk stratification, and therapeutic decision-making for persons diagnosed with blood cancer. This new text specifically focuses on the genetic alterations essential for establishing diagnosis and assesses how they might impact the precision oncology standard of care.

Providing an authoritative review of the state of the art, this is essential reading for physicians, hematologists, and oncologists for optimal management of individual patients.

CRC Press

Market: Medicine

October 2018: 7 x 10: 233pp

Hb: 978-1-138-34842-4: **\$249.95**

eBook: 978-1-498-74700-4

* For full contents and more information, visit: www.crcpress.com/9781138348424

2nd Edition · NEW EDITION

Reconstructive and Reproductive Surgery in Gynecology, Second Edition

Two Volume Set



Edited by **Malcolm G. Munro**, David Geffen School of Medicine at UCLA, Los Angeles, California, USA and **Victor Gomel**, University of British Columbia, Vancouver, Canada

This new edition of a groundbreaking book is now in two volumes, on 'Fundamentals, Symptoms, and Conditions' on 'Reconstructive and Fertility Preserving Surgery and Procedures. From a distinguished editorial team and internationally recognized contributors the text educates surgeons on the techniques and procedures now needed in gynecology, with a special focus on reconstructive vaginal, hysteroscopic, laparoscopic, and laparotomic surgery, including

that designed to preserve or enhance fertility. The reader can now more readily understand pathogenesis, appropriate investigation, and application of both surgical and nonsurgical strategies and techniques.

CRC Press

Market: Medicine

December 2018: 8-1/2 x 11: 670pp

eBook: 978-0-429-45719-7

Pack - Book and Ebook: 978-1-138-31406-1: **\$244.95*** For full contents and more information, visit: www.crcpress.com/9781138314061

6th Edition · NEW EDITION

Silver's Joint and Soft Tissue Injection

Injecting with Confidence, Sixth Edition

David Silver

This is a comprehensive guide to diagnosing conditions and the benefits (and potential pitfalls) of steroid injections, used by an increasing range of practitioners. It looks at all the practical skills as well as general information, medico-legal issues and clinical errors to avoid. This Sixth Edition has been completely updated and expanded, with two new chapters on the evidence base and inflammatory arthropathy. Updated physiotherapy assessment and treatment options are now incorporated within the chapters on joint injections. The book describes, step-by-step, the required skills for each procedure using full-colour photographs and explanatory illustrations.

CRC Press

Market: Medicine

November 2018: 6 1/7 x 9 1/5: 124pp

Hb: 978-1-138-60420-9: **\$124.95**Pb: 978-1-138-60417-9: **\$49.95**

eBook: 978-0-429-46864-3

Prev. Ed Pb: 978-1-846-19500-6

* For full contents and more information, visit: www.crcpress.com/9781138604179

4th Edition · NEW EDITION

Stone's Plastic Surgery Facts: A Revision Guide, Fourth Edition

Tor Wo Chiu, Plastic Surgery, Dept of Surgery, Prince of Wales Hospital, Hong Kong

Stone's Plastic Surgery Facts 4e provides a complete revision tool for the FRCS exit examination in plastic surgery. Written in the form of notes and lists, the full range of plastic surgery topics is covered as follows, wound care, burns, head & neck, cleft lip and palate and craniofacial anomalies, breast, hand and upper limb, lower limb, skin and soft tissue tumours, genitourinary and trunk, aesthetic and general plastic surgery. Updated article summaries and a review section in each chapter highlight important points and explain common misconceptions. A vital resource for the surgical trainee.

CRC Press

Market: Medicine

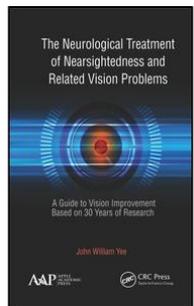
October 2018: 7 x 10: 548pp

Hb: 978-1-138-59673-3: **\$249.95**Pb: 978-1-138-03170-8: **\$99.95**

eBook: 978-1-315-18567-5

* For full contents and more information, visit: www.crcpress.com/9781138031708**The Neurological Treatment for Nearsightedness and Related Vision Problems**

A Guide to Vision Improvement Based on 30 Years of Research



John William Yee

This volume introduces and explains an effective treatment for correcting nearsightedness and related problems naturally and neurologically. The author presents his methodology of correcting primary refractive errors in the mild and moderate myopic range using Ortho C, a treatment that reduces the excessive tension to reinstate the proper neurological message of the eye. The author describes his successful treatment that reduces the excessive tension to reinstate the proper neurological message of the eye. It includes a myriad of case studies showing the effectiveness of this treatment, based on the author's over 30 years of research.

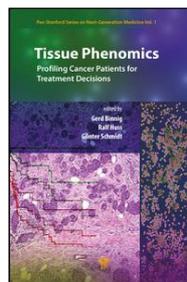
Apple Academic Press

Market: Ophthalmology

December 2018: 6 x 9: 275pp

Hb: 978-1-771-88732-8: **\$89.95**

eBook: 978-0-429-46504-8

* For full contents and more information, visit: www.crcpress.com/9781771887328**Tissue Phenomics: Profiling Cancer Patients for Treatment Decisions**

Gerd Binnig, Ralf Huss and Günter Schmidt

In the age of digitization our society is transformed into a new state. In particular, machine intelligence dramatically elevates our capability to create and digest information. In the most important area of histo-pathology, the interpretation of tissue slices from cancer patients, informatics will have an early and huge impact on treatment decisions and probably will act as the leading discipline for this transformation in medicine. Tissue Phenomics provides a comprehensive methodology aiming at the discovery of the most accurate tissue-based decision support algorithm by close integration of assay development, image analysis and bioinformatics, and optimization feedback loops.

Pan Stanford

Market: Bioinformatics

February 2018: 6 x 9: 224pp

Hb: 978-9-814-77488-8: **\$179.95**

eBook: 978-1-351-13427-9

* For full contents and more information, visit: www.crcpress.com/9789814774888**Trauma: Code Red**

Companion to the RCSEng Definitive Surgical Trauma Skills Course

Edited by **Mansoor Ali Khan and Morgan McMonagle**

The Royal College of Surgeons' of England two-day "definitive surgical trauma skills course" is run by the authors. The course began in 1997 but a new syllabus has recently been put in place. The focus is on thoracic, abdominal and vascular injuries, caused by both penetrating trauma, such as a knife, and ballistic trauma caused by guns. This Manual accompanies the course and its aim is to "demystify the body" and show how to control massive blood loss. Interventions, whether they be military or civilian, are described in full, and techniques derived from the battlefield and world-wide hotspots in trauma — are exemplified within this book.

CRC Press

Market: Medicine

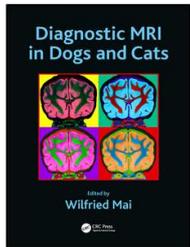
November 2018: 7 1/2 x 9 4/9: 238pp

Hb: 978-1-138-47702-5: **\$198.00**

eBook: 978-1-351-10564-4

Pack - Book and Ebook: 978-1-138-47701-8: **\$99.00*** For full contents and more information, visit: www.crcpress.com/9781138477018

Diagnostic MRI in Dogs and Cats



Edited by **Wilfried Mai**, University of Pennsylvania, School of Veterinary Medicine (Radiology), Philadelphia, USA

This is the first reference textbook to make the vast, increasingly complex topic of clinical MRI in small animals accessible to all veterinarians. It provides a well-illustrated, comprehensive overview of the current knowledge, focusing on imaging appearance rather than on clinical signs or treatment. With chapters on MRI physics and technology as well as sections on specific anatomical regions, the book functions as a stand-alone reference for the reader, whether they be a radiology/neurology resident in training or a practitioner with a need to learn about

veterinary clinical MRI. Each chapter is authored by internationally-renowned experts in the specific area of veterinary radiology.

CRC Press

Market: Veterinary Medicine

September 2018: 8-1/2 x 11: 766pp

Hb: 978-1-498-73770-8: **\$279.95**

eBook: 978-1-498-73771-5

* For full contents and more information, visit: www.crcpress.com/9781498737708

Equine Anesthesia and Pain Management

A Color Handbook

Edited by **Jane Quandt**, University of Georgia, Athens, USA, **Michele Barletta**, University of Georgia, Athens, USA and **Rachel Reed**, University of Georgia

Series: *Veterinary Color Handbook Series*

Equine Anesthesia and Pain Management: A Color Handbook is a concise and quick reference guide, clinically oriented, based on experience underpinned by published research data. The book covers anesthetic equipment, pre-anesthesia evaluation, premedication and physical restraint, induction, total intravenous anesthesia, inhalant anesthesia and partial intravenous anesthesia, monitoring, fluid therapy, recovery, complications, specific diseases or procedures, pain management, alternative analgesic techniques, anesthesia and sedation for the donkey/mule and miniature horse, CPR and euthanasia. The book contains a wealth of superb illustrations.

CRC Press

Market: Veterinary Medicine

May 2019: 6 1/7 x 9 1/5: 336pp

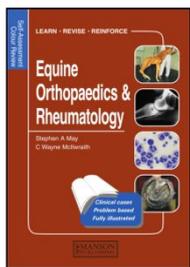
Hb: 978-1-498-74958-9: **\$89.95**

eBook: 978-1-498-74959-6

* For full contents and more information, visit: www.crcpress.com/9781498749589

Equine Orthopaedics and Rheumatology

Self-Assessment Color Review



Edited by **Stephen May**, The Royal Veterinary College, London, UK and **C. Wayne McIlwraith**, Colorado State University, USA

Series: *Veterinary Self-Assessment Color Review Series*

This book covers a wide range of orthopedic and rheumatological problems encountered in equine veterinary practice and is invaluable to professionals in practice as well as veterinary and equine students. The cases are arranged randomly, just as they would be in life, and the self-assessment format is used to enable the reader to examine each case as it is presented. A superb range of color illustrations and imaging techniques, including radiography, ultrasonography, nuclear scintigraphy and arthroscopy are used to present and thoroughly

explain each case.

CRC Press

April 1998: 180pp

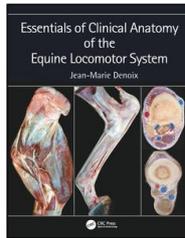
Pb: 978-1-874-54573-6: **\$49.95**

eBook: 978-1-840-76575-5

* For full contents and more information, visit: www.crcpress.com/9781874545736

New Edition Forthcoming in 2019

Essentials of Clinical Anatomy of the Equine Locomotor System



Edited by **Jean-Marie Denoix**, CIRALE-Hippolia, Goustranville, France

Essentials in Anatomy of the Equine Locomotor System presents a unique photographic record of dissections showing the topographical anatomy of the locomotor system of the horse. Readers of this book will be able to see the position and relationships of the bones, muscles, nerves, blood vessels and viscera that go to make up each region of the forelimb, vertebral column and hindlimb.

CRC Press

Market: Veterinary Medicine

December 2018: 7 x 10: 208pp

Hb: 978-1-498-75441-5: **\$79.95**

eBook: 978-0-429-42458-8

* For full contents and more information, visit: www.crcpress.com/9781498754415

Fish Diseases and Medicine

Edited by **Stephen A. Smith**, Virginia-Maryland Regional College of Veterinary Medicine, USA

This comprehensive text provides an overview of fish medicine and the diseases and disorders of tropical, ornamental, bait and food fish from the freshwater, brackish and marine environments. The book is organized by body systems, an approach consistent with how a practitioner examines a diseased animal. Nineteen chapters by expert contributors offer an international perspective, exploring the problems affecting fish in various regions of the world.

CRC Press

Market: Veterinary Medicine

April 2019: 7 x 10: 400pp

Hb: 978-1-498-72786-0: **\$99.95**

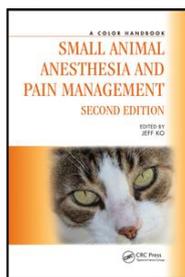
eBook: 978-1-498-72787-7

* For full contents and more information, visit: www.crcpress.com/9781498727860

2nd Edition · NEW EDITION

Small Animal Anesthesia and Pain Management, Second Edition

A Color Handbook



Edited by **Jeff Ko**, Department of Veterinary Clinical Sciences, College of Veterinary Medicine, Purdue University

Series: *Veterinary Color Handbook Series*

This concise and quick reference guide has been completely revised to include 18 brand new chapters. The book covers anesthetic equipment, monitoring, premedication, intravenous induction agents, injectable anesthetic combinations, inhalant anesthesia, anesthesia considerations for various conditions and specific diseases, fluid therapy, anesthetic emergencies and complications, acute and chronic pain management. Drug dosages and anesthetic protocols are provided in tabular form, as well as a wealth of superb illustrations.

CRC Press

Market: Veterinary

November 2018: 6 1/7 x 9 1/5: 436pp

Hb: 978-1-138-34563-8: **\$149.95**

Pb: 978-1-138-03568-3: **\$69.95**

eBook: 978-1-315-26564-3

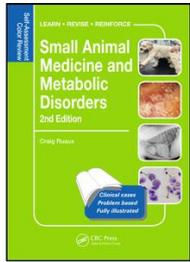
Prev. Ed Pb: 978-1-840-76179-5

* For full contents and more information, visit: www.crcpress.com/9781138035683

2nd Edition · NEW EDITION

Small Animal Medicine and Metabolic Diseases, Second Edition

Self-Assessment Color Review



Edited by **Craig Ruaux**, Massey University, Institute of Veterinary and Biomedical Sciences, Palmerston North, New Zealand

Series: *Veterinary Self-Assessment Color Review Series*

Nearly 20 years after Bryan Tennant's first edition, this new update covers all aspects of diseases and disorders and affecting organs of the abdominal cavity and the endocrine/metabolic system in a case-based format. Responding to advances in imaging technology, digital radiography and high-resolution ultrasonography as well as the growth in specialised diagnostic tests for many diseases, editor Craig Raux brings together a wide variety of new cases. These cases cover

a wide spectrum of metabolic, endocrine, immune-mediated, inflammatory and infectious diseases and range in difficulty. They are presented in random order, as they would appear in everyday practice.

CRC Press

Market: Medicine

December 2018: 200pp

Hb: 978-1-138-39243-4: **\$109.95**

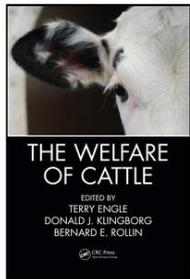
Pb: 978-1-138-03572-0: **\$43.95**

eBook: 978-0-429-40172-5

Prev. Ed Pb: 978-1-874-54549-1

* For full contents and more information, visit: www.crcpress.com/9781138035720

The Welfare of Cattle



Edited by **Terry Engle**, National Agricultural Research Foundation, Ioannina, Greece, **Donald J. Klingborg, DVM**, School of Veterinary Medicine, University of California, Davis, USA and **Bernard E. Rollin**, Colorado State University, Fort Collins, USA

The Welfare of Cattle offers an accurate, detailed account of the ethical and welfare concerns related to the human use of cattle. Covering both beef and dairy cattle, this book provides in-depth information on the husbandry roots of traditional agriculture, the replacement of this system by an industrial model, and the resulting welfare challenges associated

with feedlots, highly industrialized dairies, and slaughterhouses killing huge numbers of animals who have been transported great distances. It explores the ways in which people who are providing care for cattle can take their first step, or their next step, toward enhancing the welfare of these animals.

CRC Press

Market: Agricultural Science

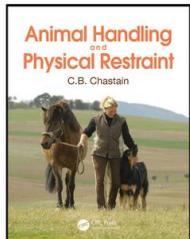
October 2018: 7 x 10: 346pp

Hb: 978-1-138-19706-0: **\$99.95**

eBook: 978-1-315-28245-9

* For full contents and more information, visit: www.crcpress.com/9781138197060

Animal Handling and Physical Restraint



C. B. Chastain, University of Missouri, College of Veterinary Medicine, Columbia, USA

The aim of the book is to prepare future or current veterinarians and veterinary technologists, technicians/nurses, and assistants to be able to handle animals more safely, gain the confidence of animals and their owners, and instruct owners in proper animal handling methods. No handling or restraint of animals is without risk, but proper animal handling and restraint aids in reducing the chance of physical or infectious disease injury to the handler and the animal handled. Minimum-stress handling of farm and ranch animals raised for meat, milk, or fiber also aids

the producer in being more humane and gaining greater profitability.

CRC Press

Market: Veterinary Medicine

December 2017: 382pp

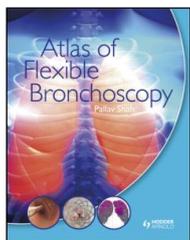
Hb: 978-1-498-76193-2: **\$89.95**

Pb: 978-0-367-02832-9: **\$49.95**

eBook: 978-1-315-15331-5

* For full contents and more information, visit: www.crcpress.com/9781498761932

Atlas of Flexible Bronchoscopy



Pallav Shah, MD FRCP Consultant Physician and Honorary Senior Lecturer, Royal Brompton Hospital, Chelsea and Westminster Hospital and Imperial College London, UK

This unique and comprehensive atlas by an expert practitioner provides an innovative pictorial guide to flexible bronchoscopy, one of the most exciting and challenging procedures in respiratory medicine today. The book will be invaluable to those training in respiratory medicine, plus also specialist respiratory nurses and practicing pulmonologists who wish to expand their practice and knowledge of the technique.

CRC Press

December 2011: 8 1/4 x 10 6/7: 256pp

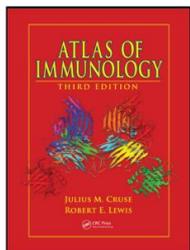
Hb: 978-0-340-96832-1: **\$215.00**

eBook: 978-1-444-14950-0

* For full contents and more information, visit: www.crcpress.com/9780340968321

3rd Edition

Atlas of Immunology



Julius M. Cruse, MD, PhD, University of Mississippi Medical Center, Jackson, USA and Robert E. Lewis, University of Mississippi Medical Center, Jackson, USA

With more than 1300 figures, line drawings, and photographs, Atlas of Immunology clearly demonstrates that a picture is worth a thousand words. Each entry in this third edition has been revised to reflect recent advances in scientific knowledge based on current research. A new chapter, Immunophenotyping of Hematopoietic Malignancies, has been added and the History of Immunology chapter has been expanded, detailing pivotal research developments. The contents of the book range from photographs of field pioneers to illustrations of molecular structures of recently characterized cytokines, major histocompatibility complex molecules, immunoglobins, and molecules of related interest.

CRC Press

Market: Medicine - Immunology

April 2010: 8-1/2 x 11: 958pp

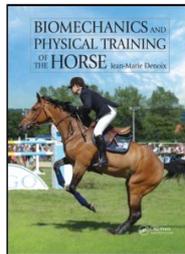
Hb: 978-1-439-80268-7: **\$150.00**

eBook: 978-1-439-80269-4

Prev. Ed Hb: 978-0-849-31567-1

* For full contents and more information, visit: www.crcpress.com/9781439802687

Biomechanics and Physical Training of the Horse



Jean-Marie Denoix, Centre for Imaging and Research in Locomotor Problems in Horses, Goustranville, France

Effective horse trainers strive to improve the performance of their horses while preserving the integrity of the musculoskeletal apparatus. This volume enables trainers to optimize the different exercises their horses undergo during training and competition. Following a description of the biomechanics of the muscles underlying equine movement, the book discusses the muscles of the forelimb, hindlimb, and neck and trunk. These fundamentals have direct bearing on the later chapters, which focus on training and the core exercises for a horse. This text is illustrated throughout by the author's top-quality photographs,

diagrams, and his own beautiful anatomical drawings.

CRC Press

Market: Veterinary Science

January 2014: 192pp

Hb: 978-1-840-76192-4: **\$54.95**

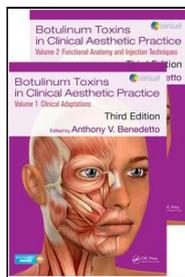
eBook: 978-1-840-76656-1

* For full contents and more information, visit: www.crcpress.com/9781840761924

3rd Edition

Botulinum Toxins in Clinical Aesthetic Practice 3E

Two Volume Set



Edited by Anthony V Benedetto

Series: *Series in Cosmetic and Laser Therapy*

This bestselling guide to the complexities of botulinum toxins has now been extensively revised, updated, and expanded. Now in two volumes, Volume 1 examines clinical adaptations in the toxins in use today, use with other injectables, use for other parts of the body and other indications, and legal aspects, while Volume 2 documents in detail the functional anatomy and injection techniques for the face, neck, and upper chest. No practitioner of aesthetic medicine will want to be without this comprehensive and authoritative guide from the international experts.

CRC Press

Market: Medicine

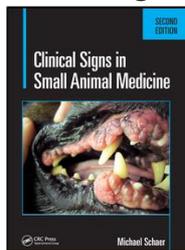
February 2018: 8-1/2 x 11: 368pp

Pack - Book and Ebook: 978-1-498-71631-4: **\$199.95**

* For full contents and more information, visit: www.crcpress.com/9781498716314

2nd Edition

Clinical Signs in Small Animal Medicine



Michael Schaer D.V.M., University of Florida, College of Veterinary Medicine, USA

This new edition of the bestselling *Clinical Signs in Small Animal Medicine* presents 800 all new color photographs of the highest quality, with detailed captions that focus on key pointers to diagnosis and treatment. The book is organised into chapters by body system, each beginning with a list of 'Clinical Pearls'. These amusing and accurate key points will be invaluable when considering conditions or highlighting common concerns. Within each chapter, the superb photographs of real cases are annotated with brief, key information that provides a succinct and useful reminder of lessons learned.

CRC Press

Market: Veterinary Medicine

September 2016: 7 x 10: 228pp

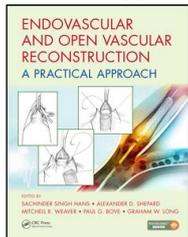
Pb: 978-1-498-76684-5: **\$83.95**

eBook: 978-1-315-38035-3

* For full contents and more information, visit: www.crcpress.com/9781498766845

Endovascular and Open Vascular Reconstruction

A Practical Approach



Edited by **Sachinder Singh Hans**, Medical Director of Vascular and Endovascular Services, Henry Ford Macomb Hospital, Clinton Township; Chief, Vascular Surgery, St John Macomb Hospital, Warren; Clinical Assistant Professor of Surgery, Wayne State USM, Detroit, MI, USA, **Alexander D. Shepard**, Senior Staff Surgeon, Division of Vascular Surgery Fisher Chair in Vascular Surgery, Henry Ford Hospital Professor of Surgery, Wayne State University School of Medicine, **Mitchell R. Weaver**, Clinical assistant professor of surgery Wayne state university school of Medicine Detroit MI Senior Vascular Surgeon, Henry Ford Hospital, Detroit,

MI, **Paul Bove**, Assistant Professor of Surgery, Oakland University William Beaumont School of Medicine and **Graham W. Long**, Associate Professor of Surgery, Oakland University William Beaumont School of Medicine Medical Director, Surgical Clinical Trials Office, William Beaumont Hospital, Royal Oak, Michigan

In recent years, the growth in endovascular procedures has meant that vascular trainees may not gain sufficient experience to be competent in open vascular reconstructions following completion of their training. At the same time many senior surgeons have somewhat limited experience of endovascular techniques. This book will assist junior and senior surgeons and trainees in performing all types of vascular reconstructions. A key feature of the book is its clear illustrations, accompanied by pertinent case examples from vascular registries, so that readers can perform these operations with clear understanding of anatomical exposure and dissection, simplifying the conduct of the procedure.

CRC Press

Market: Medicine

December 2017: 8-1/2 x 11: 410pp

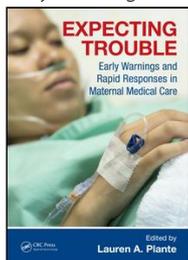
eBook: 978-1-315-11384-5

Pack - Book and Ebook: 978-1-498-76055-3: **\$189.95**

* For full contents and more information, visit: www.crcpress.com/9781498760553

Expecting Trouble

Early Warnings and Rapid Responses in Maternal Medical Care



Edited by **Lauren A. Plante**, Drexel University College of Medicine, Dept. of Obstetrics & Gynecology, Philadelphia, Pennsylvania, USA

Many institutions have adopted a maternal early warning system in order to identify women at risk of significant morbidity. Once a warning sign is identified, however, a quick response is indicated to keep the patient's condition from deteriorating. This book is designed as a practical resource to help the medical professional address these situations. Decision algorithms and summary boxes are featured prominently throughout for convenience, so emergency management decisions can be accessed easily and clearly.

CRC Press

Market: Medicine

January 2018: 7 x 10: 176pp

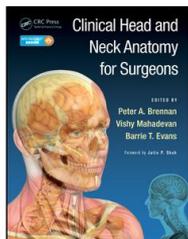
Hb: 978-0-815-37973-7: **\$179.95**

Pb: 978-1-498-74768-4: **\$89.95**

eBook: 978-1-498-74769-1

* For full contents and more information, visit: www.crcpress.com/9781498747684

Clinical Head and Neck Anatomy for Surgeons



Edited by **Peter A. Brennan**, Department of Oral and Maxillofacial Surgery, Queen Alexandra Hospital, Portsmouth, UK, **Vishy Mahadevan**, Royal College of Surgeons of England, London, UK and **Barrie T. Evans**, Southampton University Hospitals, UK

This book is a refreshing new approach to the surgical anatomy of one of the most complex regions of the human body. Each chapter describes in detail the anatomy of a key area or structure, accompanied by high-quality medical illustrations and photographs to aid understanding. The text includes essential details of common and rare anatomical variants and potential danger areas and pitfalls, enabling surgeons to be fully prepared for all eventualities. This book will provide surgeons with trustworthy guidance to avoid hazards and assist with consistent outcomes for their patients.

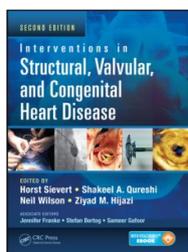
CRC Press | Market: Surgery

November 2015: 7 4/9 x 9 2/3: 338pp

Hb and eBook: 978-1-4441-5737-6: **\$159.99**

2nd Edition

Interventions in Structural, Valvular and Congenital Heart Disease



Edited by **Horst Sievert**, Sankt Katharinen Hospital, Frankfurt, Germany, **Shakeel A. Qureshi**, Evelina Children's Hospital, London, United Kingdom, **Neil Wilson**, Heart Institute, Children's Hospital Colorado and **Ziyad M. Hijazi**

The book covers all interventions in structural, valvular, and congenital heart disease in a practical, straightforward manner. Written by an international team of adult and pediatric interventional cardiologists, the book demonstrates how to perform interventional cardiology for congenital, structural, and valvular heart disease in both the pediatric and adult patient. Fully updated with new techniques, devices, and pedagogical tools, this revised edition is a key purchase for any interventional cardiologist.

CRC Press

Market: Medicine

February 2015: 8-1/2 x 11: 1051pp

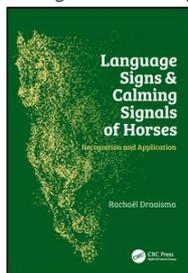
eBook: 978-1-482-21564-9

Pack - Book and Ebook: 978-1-482-21563-2: **\$329.95**

* For full contents and more information, visit: www.crcpress.com/9781482215632

Language Signs and Calming Signals of Horses

Recognition and Application



Rachael Draaisma

This practical book helps you interpret and connect the physical signals that horses display in response to their environment. These signals are evident in the everyday actions, gestures and attitudes that horses communicate to each other, but are often so subtle that they can go unnoticed by humans. This book aims to rectify that, offering horse lovers and equine professionals an opportunity to gain a unique insight into their 'horse's world', allowing them to calm the horse before his stress rises to an unmanageable level

CRC Press

Market: Medicine

October 2017: 182pp

Hb: 978-1-138-07015-8: **\$30.99**

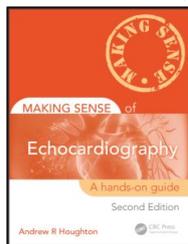
eBook: 978-1-315-26566-7

* For full contents and more information, visit: www.crcpress.com/9781138070158

2nd Edition

Making Sense of Echocardiography

A Hands-on Guide, Second Edition



Edited by **Andrew R Houghton**, MA(Oxon) DM FRCP(London & Glasgow), Consultant Cardiologist, Grantham and District Hospital, Grantham, UK

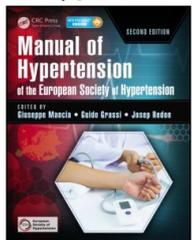
Series: *Making Sense of*

Building on the success of the original work, the second edition of this book provides an up-to-date, accessible overview with strong clinical focus and concentration on real-life scenarios, making it especially relevant in day-to-day practice. New chapters discuss myocardial mechanics and speckle tracking along with 3D echo. The book also contains significantly expanded and updated material on contrast echo, tissue Doppler imaging, intravascular ultrasound and epicardial echo, the left ventricle and its systolic function, left ventricular diastolic function, and the left atrium. This edition is also supplemented with new illustrations and an updated website.

CRC Press | Market: Medicine | Pb: 978-1-4441-6318-6: **\$60.95**

2nd Edition

Manual of Hypertension of the European Society of Hypertension



Edited by **Giuseppe Mancia**, University of Milano-Bicocca, Piazza dell'Ateneo Nuovo, 1, Milan, MI 20126, Italy and **Guido Grassi**, University of Milano Bicocca, Piazza dell'Ateneo Nuovo 1, Milano, MI 20126, Italy

Now in its second edition, this volume reflects emerging concepts that have the potential to impact diagnostic and therapeutic approaches to hypertension. Starting with epidemiology, risk factors, and etiological and pathophysiological aspects, the book discusses hypertension-based damage to body organs and systems, blood pressure measurements and other diagnostic procedures, and pharmacological,

nonpharmacological, and medical treatments. The contributors review the effects of hypertension in special populations, including diabetes patients, children, in pregnancy, and post-transplant. They also examine cost-benefit aspects of hypertension treatment and the basics of running a hypertension center.

CRC Press

Market: Cardiology

June 2014: 8-1/2 x 11: 635pp

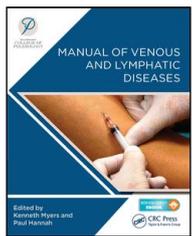
eBook: 978-1-841-84998-0

Pack - Book and Ebook: 978-1-841-84997-3: **\$199.95**

Prev. Ed Pack - Book and Ebook: 978-0-203-09112-8

* For full contents and more information, visit: www.crcpress.com/9781841849973

Manual of Venous and Lymphatic Diseases



Australasian College of Phlebology, Ken Myers, Victoria Vein Clinic, Suite 506, 100 Victoria Pde, East Melbourne, Vic 3002, Australia and **Paul Hannah**

The *Manual of Venous and Lymphatic Diseases* constitutes a concise but comprehensive and contemporary description of the nature and management of venous and lymphatic diseases. This innovative book instructs the post-graduate trainee in phlebology and is also valuable to undergraduate students wishing to gain a broader knowledge than is available in general surgical texts. Additionally, it is a useful reference for practising phlebologists, vascular surgeons and imaging specialists. The

text covers basic principles, diagnosis and treatment of chronic venous disease, venous thrombo-embolism, lymphoedema and vascular malformations.

CRC Press

Market: Medicine

February 2018: 7 1/2 x 9 1/2: 335pp

Hb: 978-1-138-03686-4: **\$220.00**

eBook: 978-1-315-17828-8

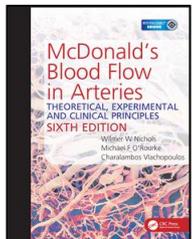
Pack - Book and Ebook: 978-1-138-03676-5: **\$110.00**

* For full contents and more information, visit: www.crcpress.com/9781138036765

6th Edition

McDonald's Blood Flow in Arteries

Theoretical, Experimental and Clinical Principles



Charalambos Vlachopoulos, National and Kapodistrian University of Athens, 1st Dept. of Cardiology, Hippokraton Hospital, 114 Vas. Sophias Ave., Athens, Attiki, 11527, Greece, **Michael O'Rourke**, St Vincent's Clinic, Suite 810, 438 Victoria Street, Darlinghurst, NSW 2010, Australia and **Wilmer W. Nichols**

For over fifty years this volume has remained the definitive reference work in the field of arterial hemodynamics, covering arterial structure and function with special emphasis on pulsatile flow and pressure. The sixth edition continues to provide the theoretical basis required for a thorough understanding of

arterial blood flow in both normal and pathological conditions, while keeping clinical considerations and readability paramount throughout the text. With an abundance of illustrations to clarify key principles, the book discusses arterial biomarkers, atherosclerosis, specific arterial disease, generalized and metabolic disease, and therapeutic strategies.

CRC Press

July 2011: 8 1/4 x 10 6/7: 768pp

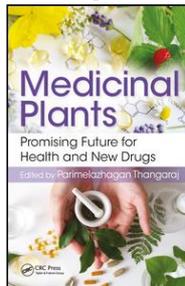
eBook: 978-1-444-12878-9

Pack - Book and Ebook: 978-0-340-98501-4: **\$227.00**

* For full contents and more information, visit: www.crcpress.com/9780340985014

Medicinal Plants

Promising Future for Health and New Drugs



Edited by **Parimelazhagan Thangaraj**

This book highlights the importance of traditional medicines and how they are used in development of herbal drugs. It also focuses on the standardization of herbal medicine and evaluates opportunities for advancing herbal drug research. It addresses issues in relation to utilization of medicinal plants and shares the importance of herbs in nutraceuticals and research innovations in herbal science. The book provides most competitive techniques being used in research pertaining to plants.

CRC Press

Market: Chemistry

April 2018: 6-1/8 x 9-1/4: 382pp

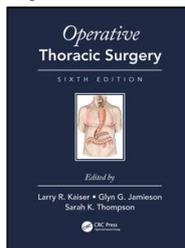
Hb: 978-0-815-37052-9: **\$169.95**

eBook: 978-1-351-04651-0

* For full contents and more information, visit: www.crcpress.com/9780815370529

6th Edition

Operative Thoracic Surgery



Edited by **Larry R. Kaiser**, Temple University, Philadelphia, Pennsylvania, USA, **Glyn Jamieson**, University of Adelaide, Australia and **Sarah K. Thompson**, Royal Adelaide Hospital, Australia

Over a decade after the last edition, *Operative Thoracic Surgery*, Sixth Edition has been thoroughly revised and updated by a team of prestigious international contributors. Particular emphasis is given to new and emerging techniques, particularly minimally invasive procedures, ensuring that the book remains an essential resource for surgeons in training, residents and fellows in thoracic and esophageal surgery, and fully qualified

practitioners needing a definitive reference. Additional text describes the principles and justification of choosing each procedure, pre-operative assessment and preparation, post-operative care and outcomes.

CRC Press

Market: Medicine

December 2017: 8-1/2 x 11: 462pp

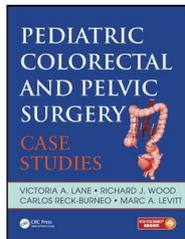
eBook: 978-1-482-29959-5

Pack - Book and Ebook: 978-1-482-29957-1: **\$379.95**

* For full contents and more information, visit: www.crcpress.com/9781482299571

Pediatric Colorectal and Pelvic Surgery

Case Studies



Victoria A. Lane, **Richard J. Wood**, Nationwide Children's Hospital Center for Colorectal and Pelvic Reconstruction, Columbus, Ohio, USA, **Carlos Reck** and **Marc A. Levitt**, Nationwide children's hospital - center for colorectal and pelvic reconstruction, Columbus, Ohio, USA

This handbook teaches and explains the key principles in the management of complex pediatric colorectal diagnoses. Using case-based presentations, radiographic images, and operative images with Multiple Choice Questions to test knowledge, this book is an invaluable educational tool. 'Learning Points' are included and the text includes comprehensive explanatory

chapters. The 60 cases encompass the full range of pediatric conditions, and the additional learning material completes this unique handbook. The interactive e-book further enhances the learning experience for all clinicians involved in the treatment of children suffering from colorectal disorders.

CRC Press

Market: Medicine

August 2017: 276pp

Hb: 978-1-138-71578-3: **\$149.95**

eBook: 978-1-315-20705-6

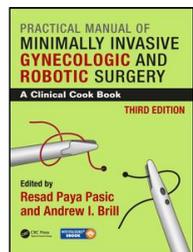
Pack - Book and Ebook: 978-1-138-03177-7: **\$69.95**

* For full contents and more information, visit: www.crcpress.com/9781138031777

3rd Edition

Practical Manual of Minimally Invasive Gynecologic and Robotic Surgery

A Clinical Cook Book 3E



Edited by **Resad Paya Pasic**, Department of Obstetrics & Gynecology, University of Louisville School of Medicine, KY, USA and **Andrew I. Brill**, Department of Minimally Invasive Gynecology, California Pacific Medical Center, San Francisco, CA, USA

This third edition has been extensively updated to provide the gynecologic surgeon with a state-of-the-art and practical resource that can be used to review or learn about commonly performed surgical procedures in minimally invasive gynecology. To meet the needs of both novice and experienced surgeons, the text is engineered to cover the clinical decision-making, key instrumentation, and technical cascade for each surgical procedure.

CRC Press

Market: Medicine / Gynecology

March 2018: 8-1/2 x 11: 374pp

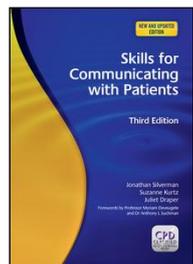
eBook: 978-1-351-00650-7

Pack - Book and Ebook: 978-1-482-21632-5: \$179.95

* For full contents and more information, visit: www.crcpress.com/9781482216325

3rd Edition

Skills for Communicating with Patients



Jonathan Silverman, Suzanne Kurtz and Juliet Draper

"The importance of this skills-based consultation model cannot be overstressed."; — From the Foreword by Myriam Deveugele
This book is essential reading for healthcare professionals at all levels, course organisers, facilitators and programme directors.

CRC Press

September 2013: 328pp

Hb: 978-1-138-44359-4: \$195.00

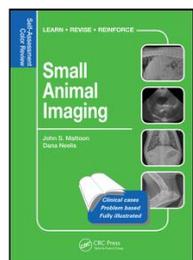
Pb: 978-1-846-19365-1: \$57.95

eBook: 978-1-910-22726-8

* For full contents and more information, visit: www.crcpress.com/9781846193651

Small Animal Imaging

Self-Assessment Review



John S. Mattoon, Adjunct Professor of Radiology, College of Veterinary Medicine, Washington State University, USA, and **Dana Neelis**

Series: *Veterinary Self-Assessment Color Review Series*

Presented in an easy-to-ready format, Small Animal Imaging: Self-Assessment Color Review offers a case-based approach to reviewing and interpreting images and developing a differential diagnosis when necessary. Nearly 200 cases are presented, each beginning with the patient's age, gender, breed, and species. The reason the patient was brought to the clinic is discussed along with preliminary examination and diagnostic test findings. Supporting high-quality images are also presented with each

case. A separate section presents detailed answers including information on the radiographic findings, radiographic diagnosis, comments, and notes on whether further imaging or evaluation is needed.

CRC Press

Market: Veterinary Medicine

March 2018: 262pp

Hb: 978-1-138-09149-8: \$149.95

Pb: 978-1-482-22520-4: \$43.95

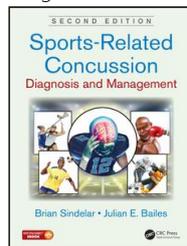
eBook: 978-1-482-22521-1

* For full contents and more information, visit: www.crcpress.com/9781482225204

2nd Edition

Sports-Related Concussion

Diagnosis and Management, Second Edition



Brian Sindelar, NorthShore University Health System, Evanston, Illinois, USA and **Julian E. Bailes**, University of Florida, Gainesville, USA

This new edition reflects the explosion of knowledge in basic science and clinical care for athletes with mild traumatic brain injury or concussion. Interest in management and methodology for making diagnoses and improving the clinical outcomes have changed dramatically. All U.S. states have laws dictating how sports concussion patients are cared for and require return to play decisions be coordinated with best practice methods.

Epidemiology, classification, and biology of sports concussion, as well as, brain imaging, assessment tests, neuropsychological measures, and management strategies are covered. Illustrative clinical cases, correlative examples, and historical insights are featured.

CRC Press

Market: Medicine

December 2017: 7-1/2 x 10: 257pp

Hb: 978-1-138-09543-4: \$149.95

eBook: 978-1-315-15362-9

Pack - Book and Ebook: 978-1-498-76457-5: \$69.95

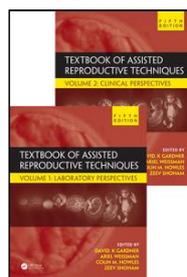
Prev. Ed Pack - Book and Ebook: 978-1-576-26050-0

* For full contents and more information, visit: www.crcpress.com/9781498764575

5th Edition

Textbook of Assisted Reproductive Techniques

Two Volume Set



Edited by **David K. Gardner**, University of Melbourne, Australia, **Ariel Weissman**, Edith Wolfson Medical Center, Holon, Israel, **Colin M. Howles**, Aries Consulting, Geneva, Switzerland and **Zeev Shoham**, Kaplan Medical Center, Rehovot, Israel

Already established as a classic comprehensive reference for the whole team at the IVF clinic, this new edition has been extensively revised, with the addition of several important new contributions on laboratory (including advanced sperm selection techniques for ICSI, human embryo biopsy procedures, oocyte activation, managing an oocyte bank, artificial gametes, and epigenetics) as well as on clinical topics (including GnRH agonist

triggering, segmentation of IVF treatment, uterus transplantation, and risk and safety management). As previously, methods, protocols, and techniques of choice are presented by eminent contributors internationally.

CRC Press

Market: Medicine

January 2018: 8-1/2 x 11: 1040pp

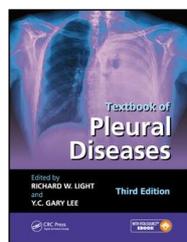
eBook: 978-1-351-22822-0

Pack - Book and Ebook: 978-1-498-74009-8: \$299.95

* For full contents and more information, visit: www.crcpress.com/9781498740098

3rd Edition

Textbook of Pleural Diseases



Edited by **Richard W. Light**, MD FCCP Professor of Medicine, Vanderbilt University, Nashville, Tennessee, USA and **Y C Gary Lee**, Oxford Centre for Respiratory Medicine and University of Oxford, UK

The third edition of an internationally renowned, award-winning reference covers both the basic and clinical science on pleural diseases. The clinical sections are written in a uniform style and include the definition, epidemiology, etiology, pathogenesis, clinical presentation, investigations, treatments, and possible complications for various pleural diseases. Other clinical chapters discuss both familiar and less common disease aspects. Five

new chapters have been added, and the remaining chapters have been substantially updated in this new edition.

CRC Press

Market: Medicine

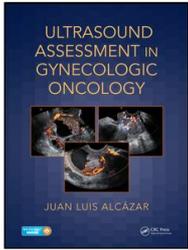
January 2016: 8-1/2 x 11: 651pp

eBook: 978-1-482-22251-7

Pack - Book and Ebook: 978-1-482-22250-0: \$259.95

* For full contents and more information, visit: www.crcpress.com/9781482222500

Ultrasound Assessment in Gynecologic Oncology



Juan Luis Alcázar, Full Professor of Obstetrics and Gynecology, School of Medicine, University of Navarra, Pamplona, Spain

This innovative guide will help gynecologists or gynecologic surgeons to monitor the staging and progress of oncology treatment. An international expert here shows what office ultrasound can be used to achieve, how it correlates with other clinical findings, and how it can be integrated as necessary with other modalities and with the latest technological advances and developments in the field.

CRC Press

Market: Medicine

March 2018: 8-1/2 x 11: 81pp

eBook: 978-1-315-17239-2

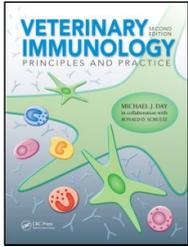
Pack - Book and Ebook: 978-1-138-04432-6: **\$99.95**

* For full contents and more information, visit: www.crcpress.com/9781138044326

2nd Edition · TEXTBOOK · READER

Veterinary Immunology

Principles and Practice, Second Edition



Michael J. Day, University of Bristol, Langford, UK and **Ronald D. Schultz**, University of Wisconsin-Madison, USA

Thoroughly updated, the new edition of reliable veterinary text retains the features that made the first edition so popular. With clear learning objectives and key points in each chapter, it focuses on immunological principles while applying them to the disease process and to clinical practice. Illustrated with color diagrams and photographs, the book contains 17 clinical case studies demonstrating clinical context for the material covered in the chapters. The book is a practical textbook for veterinary students and a handy reference for practitioners.

CRC Press

Market: Veterinary Medicine

June 2014: 336pp

Pb: 978-1-482-22462-7: **\$55.95**

eBook: 978-1-482-22463-4

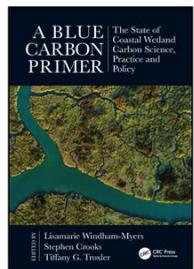
Prev. Ed Pb: 978-1-840-76143-6

* For full contents and more information, visit: www.crcpress.com/9781482224627



A Blue Carbon Primer

The State of Coastal Wetland Carbon Science, Practice and Policy



Edited by **Lisamarie Windham-Myers**, US Geological Survey, **Stephen Crooks**, Environmental Science Association, San Francisco, California, USA and **Tiffany G. Troxler**, Florida International University, Miami, USA

Series: *CRC Marine Science*

Blue Carbon has emerged as a term that represents the distinctive carbon stocks and fluxes into or out of coastal wetlands such as marshes, mangroves, and seagrasses. The Blue Carbon concept has been rapidly emerging in science literature and is highly relevant politically, as nations and markets are developing blue carbon monitoring and management tools and policies. This book is a compendium of the state of the

science, the state of maps and mapping protocols, and the state of policy incentives (including economic valuation of blue carbon), with additional sections on operationalizing blue carbon projects and case studies with global relevance.

CRC Press

Market: Life Science

December 2018: 7 x 10: 518pp

Hb: 978-1-498-76909-9: \$149.95

eBook: 978-0-429-43536-2

* For full contents and more information, visit: www.crcpress.com/9781498769099

4th Edition · NEW EDITION

Fermentation Microbiology and Biotechnology, Fourth Edition

Edited by **E. M. T. El-Mansi**, Sharda University, Greater Noida, India

Fermentation Microbiology and Biotechnology, Fourth Edition explores and illustrates the broad array of metabolic pathways employed for the production of primary and secondary metabolites as well as biopharmaceuticals. This updated and expanded edition and entirely re-written chapters, address the whole spectrum of fermentation biotechnology, from fermentation kinetics and dynamics to protein and co-factor engineering. In addition, The 4th edition includes new chapters on industrial biotechnology and biofuels. The Fourth edition builds upon the fine pedigree of its earlier predecessors and extends the spectrum of the book to reflect the multidisciplinary and buoyant nature of this subject area.

CRC Press

Market: Life Science

January 2019: 8-1/2 x 11: 424pp

Hb: 978-1-138-58102-9: \$199.95

eBook: 978-0-429-50698-7

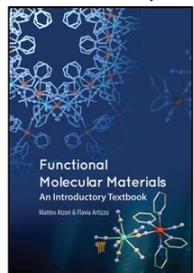
Prev. Ed Hb: 978-1-439-85579-9

* For full contents and more information, visit: www.crcpress.com/9781138581029

TEXTBOOK · READER

Functional Molecular Materials

An Introductory Textbook



Matteo Atzori and Flavia Artizzu

This book provides a general overview of molecular materials, discussing their key features in a simple and organic way by focusing more on basic concepts rather than on specialized descriptions, in order to supply the non-expert reader with the immediate fundamental tools and hints to understand and develop research in this field. With this view, it is a step-by-step guide toward the preparation of functional molecular materials, where the knowledge and understanding so far attained by the scientific community through the investigation of significant archetypical examples is deconstructed down to the fundamental basis and then presented in reverse, from the base to the top.

Pan Stanford

Market: Inorganic Chemistry

April 2018: 6 x 9: 400pp

Hb: 978-9-814-77476-5: \$149.95

eBook: 978-1-351-23366-8

* For full contents and more information, visit: www.crcpress.com/9789814774765

Fundamentals of Fluorescence Imaging



Edited by **Guy Cox**

Fluorescence imaging, at macro, micro and sub-micro scales, has revolutionized biological science in the past 30 years. Immuno-labeling has provided the precise targeting of molecules in the fixed tissue, while fluorescent proteins have enabled localization in living tissues. Fluorescent indicators enable the imaging of dynamic changes in cell metabolism. This book covers for the first time imaging at all scales, from macro to sub-micro (super-resolution). All the contributors are at the cutting edge of their field.

Pan Stanford

Market: Molecular Biology

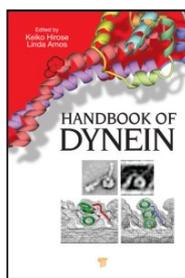
April 2019: 6 x 9: 300pp

Hb: 978-9-814-77485-7: \$179.95

eBook: 978-1-351-12940-4

* For full contents and more information, visit: www.crcpress.com/9789814774857

Handbook of Dynein



Edited by **Keiko Hirose**, National Institute of Advanced Industrial Science & Technology, Ibaraki, Japan

This book draws together recent data on both cytoplasmic and flagellar dyneins and the proteins they interact with, to give readers a clear picture of what is currently known about the structure and mechanics of these remarkable macro-molecular machines. Each chapter is written by active researchers, with a focus on currently used biophysical, biochemical, and cell biological methods. This is a useful handbook for frontline researchers as well as a textbook for advanced students.

Pan Stanford

Market: Biophysics

February 2012: 6 x 9: 350pp

Hb: 978-9-814-30333-0: \$210.00

eBook: 978-9-814-30334-7

* For full contents and more information, visit: www.crcpress.com/9789814303330

New Edition Forthcoming in 2019

TEXTBOOK

The Human Genome in Health and Disease

A Story of Four Letters

Tore Samuelsson, University of Gothenburg, Sweden

The Human Genome in Health and Disease examines the human genome, a linear sequence of roughly 3 billion bases. The intimate link between this information and biological function is systematically explored and is illustrated with inherited disorders and cancer. A range of sequence-based functional units of the human genome are thereby covered.

The book is motivated by the wealth of human sequence data currently accumulating and aids in understanding this information. It also discusses significant medical applications of human genome sequencing and genetic variation, such as the identification of causative variants in rare genetic disorders and a variety of current methods in gene therapy.

Garland Science

Market: Molecular Biology

January 2019: 8 3/8 x 10 7/8: 300pp

Hb: 978-0-367-07633-7: \$149.95

eBook: 978-0-429-02173-2

* For full contents and more information, visit:

www.garlandscience.com/product/isbn/9780367076337

Life in Deep Time

Darwin's "Missing" Fossil Record

J. William Schopf, Department of Earth, Planetary, and Space Sciences, University of California, Los Angeles, California, USA

When Darwin wrote his *Origin of Species* one of his main concerns was with the perceived shortness of the fossil record of life. Until the work of Schopf and his colleagues much of this history was thought to be unknowable. This book documents astonishing discoveries revealing the first 85% of the history of life. These earliest periods of life on Earth emerge as a tale of individual exploration told by a scholar whose 60 years of research uncovered the richness and diversity which forms the foundation of today's biodiversity.

CRC Press

Market: Life Science

November 2018: 6-1/8 x 9-1/4: 232pp

Hb: 978-1-138-39037-9: **\$59.95**

Pb: 978-1-138-38549-8: **\$29.95**

eBook: 978-0-429-42707-7

* For full contents and more information, visit: www.crcpress.com/9780429427077

Proteins Crossing Membranes

A Scientist's Memoir

Stephen Rothman, Prof. Emeritus @ Uni of CA, San Francisco

The vesicle theory of protein secretion is meant to explain the manner by which proteins - once generated - are encapsulated, transported, and secreted by cells. The theory depends upon a balance between the rate at which proteins are synthesized and secreted. This book explains the author's findings, which were critical of the theory, and documents a story of controversy, data interpretation, and acrimony. His personal narrative of the resistance to his views and his experiences with disagreements illustrates that, despite declarations to the contrary, scientists resist change just as aggressively as non-scientists.

CRC Press

Market: Life Science

January 2019: 6 x 9: 256pp

Hb: 978-0-367-07450-0: **\$149.95**

Pb: 978-0-367-07449-4: **\$59.95**

eBook: 978-0-429-02081-0

* For full contents and more information, visit: www.crcpress.com/9780367074494

A Century of Geneticists

Mutation to Medicine

Krishna Dronamraju, Foundation for Genetic Research, Houston, Texas, USA

Genetics, like all scientific disciplines, is a human endeavor. Thus, the lives of geneticists - their friendships, colleagues and associations - play an important role in the historical development of the science. This book summarizes the history of genetics by reviewing the lives of the prominent and influential researchers beginning with the earliest and simplest branches of genetics (studies of inheritance and mutation) and ending with the human genome project - the pinnacle of genetics research of the 20th century.

CRC Press

Market: Life Science

October 2018: 6-1/8 x 9-1/4: 320pp

Hb: 978-1-138-35313-8: **\$119.95**

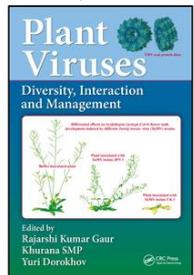
Pb: 978-1-498-74866-7: **\$49.95**

eBook: 978-1-315-15225-7

* For full contents and more information, visit: www.crcpress.com/9781498748667

Plant Viruses

Diversity, Interaction and Management



Edited by **Rajarshi Kumar Gaur**, **SMP Khurana** and **Yuri Dorokhov**

Plant viruses are significant as they affect our food supply and are capable of rapidly spreading to new plant species, so a comprehensive study of plant viruses is important in understanding their pathogenesis and prevention. This book focuses on the plant virus evolution, their molecular classification, epidemics and management. The key features in the book includes genome organization, translation and replication, virus-coded proteinases, structure of virus particles, cell receptors and host range, the RNA polymerase, quasispecies dynamics and virus evolution, and its natural habitats.

CRC Press

Market: Life Science

January 2018: 7 x 10: 387pp

Hb: 978-1-138-06151-4: **\$199.95**

eBook: 978-1-315-16228-7

* For full contents and more information, visit: www.crcpress.com/9781138061514

STUDENT REFERENCE

Chemical Equilibria

Exact Equations and Spreadsheet Programs to Solve Them

Harry L. Pardue, Professor Emeritus, Department of Chemistry, Purdue University, USA

Concepts, procedures and programs described in this book make it possible for readers to solve both simple and complex equilibria problems quickly and easily and to visualize results in both numerical and graphical forms. They allow the user to calculate concentrations of reactants and products for both simple and complicated situations. The user can spend less time doing calculations and more time thinking about what the results mean in terms of a larger problem in which she or he may be interested.

CRC Press

Market: Chemistry

November 2018: 7 x 10: 260pp

Hb: 978-1-138-36725-8: \$159.95

Pb: 978-1-138-36722-7: \$79.95

eBook: 978-0-429-42989-7

* For full contents and more information, visit: www.crcpress.com/9781138367227

2nd Edition · TEXTBOOK · READER

Chemical Reaction Engineering and Reactor Technology, Second Edition

Tapio O. Salmi, Abo Akademi, Abo-Turku, Finland, Jyri-Pekka Mikkola, Abo Akademi, Abo-Turku, Finland and Johan P. Warna, Abo Akademi, Abo-Turku, Finland

Series: *Chemical Industries*

This well received textbook develops the concept of chemical reaction engineering in a systematic manner, beginning with homogeneous reactors and gradually moving toward more complicated heterogeneous systems. Reactor technology is presented in an illustrative manner with many practical and varied applications included. Numerous realistic exercises help upper undergraduate and graduate students learn the concepts presented. A modern computing approach to chemical reaction engineering is taken throughout the material. The real-life examples make the book very attractive for a broad audience, including engineers working in chemical and process industry.

Chapman and Hall/CRC

Market: Engineering-Chemical

April 2019: 7 x 10: 672pp

Hb: 978-1-138-71250-8: \$149.95

eBook: 978-1-315-20011-8

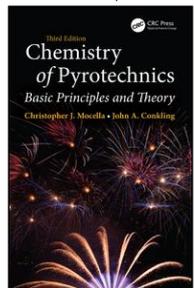
Prev. Ed Hb: 978-1-420-09268-4

* For full contents and more information, visit: www.crcpress.com/9781138712508

3rd Edition · NEW EDITION

Chemistry of Pyrotechnics

Basic Principles and Theory, Third Edition



Chris Mocella, Summer Pyrotechnics Seminars, Chestertown, Maryland, USA and John A. Conkling, Chestertown, Maryland, USA

This book provides chemists with technical insight on pyrotechnics and explosives. It emphasizes basic chemical principles and practical, hands-on knowledge in the preparation of energetic materials. It examines the interactions between and adaptations of pyrotechnics to changing technology in areas such as obscuration science and low-signature flame emission. The updated third edition discusses chemical and pyrotechnic principles, components of high-energy materials, elements of ignition, propagation, and sensitivity. It offers heat compositions, including ignition mixes, delays, thermites, and propellants and

investigates the production of smoke and sound as well as light and color.

CRC Press

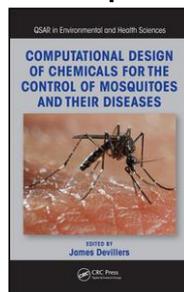
Market: Chemistry

December 2018: 6-1/8 x 9-1/4: 288pp

Hb: 978-1-138-07992-2: \$99.95

eBook: 978-1-315-11418-7

Prev. Ed Hb: 978-1-574-44740-8

* For full contents and more information, visit: www.crcpress.com/9781138079922**Computational Design of Chemicals for the Control of Mosquitoes and Their Diseases**

Edited by James Devillers, CTIS, Rillieux La Pape, France

Series: *QSAR in Environmental and Health Sciences*

There is a compelling need for new drugs and efficient treatments against mosquito-borne diseases. Environmentally safe, but effective insecticides that address the problems of resistance are required. *Computational Design of Chemicals for the Control of Mosquitoes and Their Diseases* explains how the search for new substances effective against mosquitoes and their diseases has benefited from the use of *in silico* techniques.

CRC Press

Market: Pharmaceutical Science & Regulation

January 2018: 6-1/8 x 9-1/4: 468pp

Hb: 978-1-498-74180-4: \$239.95

eBook: 978-1-315-15165-6

* For full contents and more information, visit: www.crcpress.com/9781498741804**A Different Thermodynamics and its True Heroes**

Edited by Evgeni B. Starikov

This book pays the due tribute to those scientists whose contribution to the field of thermodynamics is undoubtedly seminal but they still remain 'widely unknown.' It presents the life stories of these protagonists in detail and is the very first of its kind that will motivate young researchers to build up a logically consistent field of thermodynamics after learning about them.

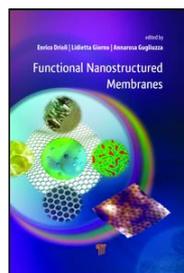
Pan Stanford

Market: Chemistry

October 2018: 6 x 9: 600pp

Hb: 978-9-814-77491-8: \$129.95

eBook: 978-0-429-50650-5

* For full contents and more information, visit: www.crcpress.com/9789814774918**Functional Nanostructured Membranes**

Enrico Drioli, Lidieta Giorno and Annarosa Gugliuzza

This book compiles cutting-edge research in membrane science, nanomaterials, and nanotechnologies, working on membrane design, membrane process engineering, and selected materials and practices for enhanced transport mass, charge, and energy. The topics covered in this book include the design of new nanostructured membranes with improved properties, together with the identification of efficient transport-property relationships. This book shares and strengthens the knowledge of making membrane technology a much more powerful and eco-friendly route.

Pan Stanford

Market: Nanomaterials

October 2018: 6 x 9: 550pp

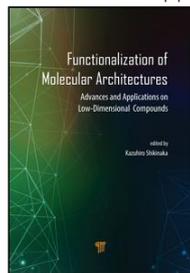
Hb: 978-9-814-77479-6: \$179.95

eBook: 978-1-351-13511-5

* For full contents and more information, visit: www.crcpress.com/9789814774796

Functionalization of Molecular Architectures

Advances and Applications on Low-dimensional Compounds



Edited by **Kazuhiro Shikinaka**

Low-dimensional compounds are molecules that correspond to various shapes such as rod, ladder (one-dimensional compounds), and sheet (two-dimensional compounds). They are ordinarily found in electromagnetic fields. Recently, versatile low-dimensional compounds were proposed for use as components of various functional materials. These new-class low-dimensional compounds contribute significantly to industrial/material sciences.

Pan Stanford

Market: Condensed Matter and Materials Science

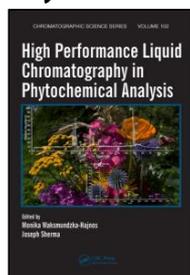
September 2018: 6 x 9: 250pp

Hb: 978-9-814-77461-1: **\$149.95**

eBook: 978-1-315-15069-7

* For full contents and more information, visit: www.crcpress.com/9789814774611

High Performance Liquid Chromatography in Phytochemical Analysis



Edited by **Monika Waksmundzka-Hajnos**, Medical University of Lublin, Poland and **Joseph Sherma**, Lafayette College, Easton, Pennsylvania, USA

Series: Chromatographic Science Series

This volume is the first book to give a complete description of the techniques, materials, and instrumentation of column HPLC and its application to essentially all primary and secondary plant metabolites. It describes the techniques and instrumentation of HPLC analysis, such as HPLC/nuclear magnetic resonance spectrometry, HPLC with photodiode array detection, and HPLC chiral analysis. It explores the application of HPLC to primary and secondary plant metabolites, including carbohydrates, amino

acids, shikimic acid derivatives, coumarins, flavonoids, lignans, steroids, alkaloids, quinoids, and more. It also discusses how HPLC is used for analyzing herbal drugs and dietary supplements.

CRC Press

November 2010: 7 x 10: 996pp

Hb: 978-1-420-09260-8: **\$305.00**

eBook: 978-1-420-09261-5

* For full contents and more information, visit: www.crcpress.com/9781420092608

New Edition Forthcoming in 2019

STUDENT REFERENCE

Intellectual Property in Chemistry

A Guide to Applying for and Obtaining a Patent for Graduate Students and Postdoctoral Scholars

Edited by **Nelson Durán**, Institute of Chemistry, University of Campinas, Brazil, **Leandro Carneiro Fonseca**, Institute of Chemistry, University of Campinas, Brazil and **Amedea B. Seabra**, Center for Natural and Human Sciences - Federal University of ABC, Brazil

This book provides detailed instructions for reading and writing a patent. The book presents useful instructions for undergraduate and graduate students as well as post-doctoral, researchers and professors in the field of Chemistry and related areas. Written from a practical point of view it answers the simple and often asked question: how should I read and write a patent? The book is particularly directed to graduate students, who are initiating their research and often lack experience with patents. The ability to write and comprehend patents is fundamental for the success of their projects.

CRC Press

Market: Chemistry

December 2018: 6-1/8 x 9-1/4: 140pp

Hb: 978-1-138-60083-6: **\$179.95**

Pb: 978-1-138-60082-9: **\$89.95**

* For full contents and more information, visit: www.crcpress.com/9781138600829

Light-Active Functional Organic Materials

Edited by **Hiroko Yamada** and **Shiki Yagai**

This book focuses on functional organic materials wherein interplay between light and organic molecules has an important role. It covers cutting-edge organic optoelectronic materials that can be applied to photovoltaics, artificial photosynthesis, and light-emitting devices. The chapters are divided into two categories, soft materials and hard materials. Soft materials include fluidal, supramolecular, and polymeric materials, while hard materials include p-extended aromatic compounds, such as porphyrins, acenes, phenacenes, and organic gold complexes.

Pan Stanford

Market: Organic Chemistry

February 2019: 6 x 9: 300pp

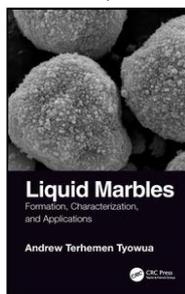
Hb: 978-9-814-80015-0: **\$149.95**

eBook: 978-0-429-44853-9

* For full contents and more information, visit: www.crcpress.com/9789814800150

Liquid Marbles

Formation, Characterization, and Applications



Edited by **Andrew T. Tyowua**, Benue State University, Makurdi, Nigeria

Certain small solid particles are surface-active at fluid interfaces and thus are able to stabilize materials previously considered impossible to stabilize in their absence. Liquid marbles, particle-coated non-sticking liquid droplets, represent one of these materials. Preparation of liquid marbles was described only about 15 years ago and they are now widely studied by many research groups and numerous applications of liquid marbles have been advanced. The book is written for postgraduates and researchers working on the area who are training to become chemists, soft matter physicists, materials scientists, and engineers.

CRC Press

Market: Chemistry

October 2018: 6-1/8 x 9-1/4: 149pp

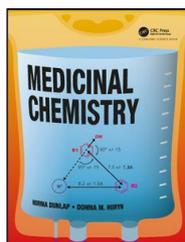
Hb: 978-1-138-19730-5: **\$159.95**

eBook: 978-1-315-28025-7

* For full contents and more information, visit: www.crcpress.com/9781138197305

TEXTBOOK

Medicinal Chemistry



Edited by **Norma K Dunlap**, Middle Tennessee State University, USA and **Donna M Huryn**, University of Pennsylvania and University of Pittsburgh, USA

Medicinal Chemistry teaches the essential concepts of medicinal chemistry from the perspective of practicing chemists, starting with a synthetic organic chemistry and structural biology foundation and interweaving coverage of therapeutics, case studies, historical context, and modern techniques. Each chapter features a Journal Club, as well as review and application questions to enhance and test comprehension. This textbook is ideal for upper-level undergraduates and graduate students

taking a one-semester survey course on medicinal chemistry and/or drug discovery, as well as scientists entering the pharmaceutical industry.

Garland Science

Market: Chemistry

April 2018: 8 3/8 x 10 7/8: 496pp

Pb: 978-0-815-34556-5: **\$115.00**

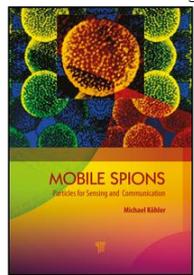
eBook: 978-1-315-10047-0

* For full contents and more information, visit:

www.garlandscience.com/product/isbn/9780815345565

Mobile Spies

Particles for Sensing and Communication



Johann Michael Koehler

This book clarifies that signal-transducing particles should be regarded as functional elements, as part of a system, not simply as special materials. It introduces concepts of bead-base sensing and "mobile spies" at the micro- and nanoscale and gives a representative overview of the variety of particle-based sensing.

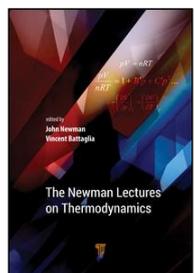
Pan Stanford

Market: Analytical Chemistry
November 2018: 6 x 9: 200pp
Hb: 978-9-814-80014-3: \$129.95
eBook: 978-0-429-44856-0

* For full contents and more information, visit: www.crcpress.com/9789814800143

TEXTBOOK · READER

The Newman Lectures on Thermodynamics



John S. Newman, University of California, Berkeley, USA and Vincent S. Battaglia, Lawrence Berkeley National Laboratory, Berkeley, CA, USA

This book presents concepts needed to define single- and multi-component systems, starting with the Gibbs function. It helps readers derive concepts of entropy and temperature and the development of material properties of pure substances. It acquaints them with applications of thermodynamics, such as cycles, open systems, and phase transitions, and eventually leads them to concepts of multiple-component systems, in particular, chemical equilibria and phase equilibria. It clearly presents all concepts that are necessary for engineers.

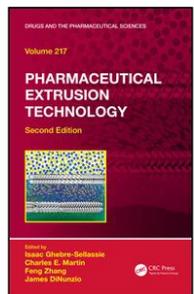
Pan Stanford

Market: Engineering
October 2018: 6 x 9: 250pp
Hb: 978-9-814-77426-0: \$49.95
eBook: 978-1-315-10861-2

* For full contents and more information, visit: www.crcpress.com/9789814774260

2nd Edition

Pharmaceutical Extrusion Technology



Edited by Isaac Ghebre-Sellassie, MEGA Pharmaceuticals, Morris Plains, New Jersey, USA, Charles E. Martin, American Leistr Extruder Corp., Somerville, NJ, Feng Zhang and James DiNunzio

Series: Drugs and the Pharmaceutical Sciences

The first edition of *Pharmaceutical Extrusion Technology* was the seminal book on pharmaceutical extrusion, focusing on extrusion as a manufacturing methodology for dosage forms. In the past 10 years, extrusion has become an accepted technology to continuously mix active pharmaceutical ingredients with excipients. This acceptance has resulted in many hardware and process advancements that have been highlighted in this second edition. This book brings together all extrusion related technical

information necessary for the development, manufacturing, and marketing of pharmaceutical dosage forms.

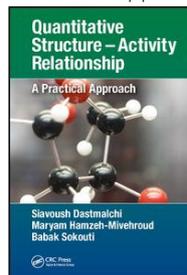
CRC Press

Market: Pharmaceutical Science & Regulation
March 2018: 6-1/8 x 9-1/4: 413pp
Hb: 978-1-498-70491-5: \$169.95
eBook: 978-1-498-70492-2
Prev. Ed Hb: 978-0-824-74050-4

* For full contents and more information, visit: www.crcpress.com/9781498704915

Quantitative Structure – Activity Relationship

A Practical Approach



Siavoush Dastmalchi, Tabriz University of Medical Sciences, Iran, Maryam Hamzeh-Mivehroud, Tabriz University of Medical Sciences, Iran and Babak Sokouti, Tabriz University of Medical Sciences, Iran

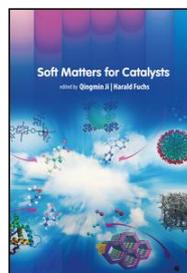
Quantitative structure–activity relationship (QSAR) is a computational approach for mathematically connecting structural features of compounds to their biological activities. This unique volume provides the essence of QSAR analysis in a practical manner. It illustrates the basic principles essential for assisting readers in performing analyses.

CRC Press

Market: Chemistry
May 2018: 6-1/8 x 9-1/4: 102pp
Hb: 978-0-815-36209-8: \$79.95

* For full contents and more information, visit: www.crcpress.com/9780815362098

Soft Matters for Catalysts



Edited by Qingman Ji and Harald Fuchs

This book emphasizes and summarizes the novel design of soft matters (molecules, polymers, assembled motifs, etc.) for nanocatalysts or supports for nanocatalysts. The diversity or specialty of soft matters offers a new perspective and great promise for the development of new nanocatalytic systems for future requirements. Soft matters can provide a simple and well-defined space for the discovery of new catalysts. At present, no other book summarizes catalysts from soft matters.

Pan Stanford

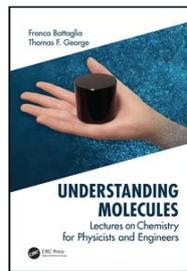
Market: Catalysis
October 2018: 6 x 9: 400pp
Hb: 978-9-814-77466-6: \$149.95
eBook: 978-1-351-27284-1

* For full contents and more information, visit: www.crcpress.com/9789814774666

TEXTBOOK · READER

Understanding Molecules

Lectures on Chemistry for Physicists and Engineers



Franco Battaglia and Thomas F. George, University of Missouri, St. Louis, USA

Chemistry is a subject that many students with differing goals have to tackle. This unique general chemistry textbook is tailored to more mathematically-oriented engineering or physics students. The authors emphasize the principles underlying chemistry rather than chemistry itself and the almost encyclopedic completeness appearing in a common textbook of general chemistry is sacrificed for an emphasis to these principles. Contained within 500 pages, it is suitable for a one-semester course for students who are strong in physics and mathematics. Over 200 problems are provided to ensure understanding, and answers are provided in the text so that the students can check their progress.

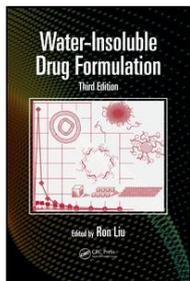
CRC Press

Market: Chemistry
October 2018: 7 x 10: 308pp
Hb: 978-1-138-32930-0: \$139.95
eBook: 978-0-429-44826-3

* For full contents and more information, visit: www.crcpress.com/9781138329300

3rd Edition

Water-Insoluble Drug Formulation



Edited by **Ron Liu**, AustarPharma, Edison, New Jersey, USA

A drug molecule must be water soluble to be readily delivered to the cellular membrane, but needs to be hydrophobic to cross the membrane. Delivering drugs in water-insoluble formulation is thus a critical matter in therapeutic drug development. *Water-Insoluble Drug Formulation, Third Edition* serves as a comprehensive reference for pharmaceutical scientists in the handling of formulation issues related to water-insoluble drugs. Reflecting the significant progress and advances since the last edition, this edition revises and updates all the chapters.

CRC Press

Market: Pharmaceutical Science & Regulation

March 2018: 7 x 10: 736pp

Hb: 978-1-498-72941-3: **\$259.95**

eBook: 978-1-315-12049-2

Prev. Ed Hb: 978-0-849-39644-1

* For full contents and more information, visit: www.crcpress.com/9781498729413

TEXTBOOK · READER

Automata and Computability

Programmer's Perspective

Ganesh Gopalakrishnan

This class-tested textbook provides a comprehensive and accessible introduction to the theory of automata and computation. The author uses illustrations, engaging examples, and historical remarks to make the material interesting and relevant for students. It incorporates modern/handy ideas, such as derivative-based parsing and a Lambda reducer showing the universality of Lambda calculus. The book also shows how to sculpt automata by making the regular language conversion pipeline available through a simple command interface. A Jupyter notebook will accompany the book to feature code, YouTube videos, and other supplements to assist instructors and students.

Chapman and Hall/CRC

Market: Computer Science & Engineering

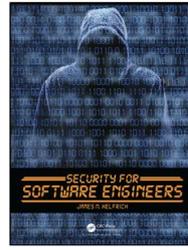
December 2018: 8-1/2 x 11: 344pp

Hb: 978-1-138-55242-5: **\$79.95**

eBook: 978-1-315-14817-5

* For full contents and more information, visit: www.crcpress.com/9781138552425

TEXTBOOK · READER

Security for Software Engineers

James N. Helfrich, Brigham Young University, Idaho, USA

Most textbooks about Computer Security targets end-users, or CIT/IT professionals. Few if any truly target undergraduate software engineering students. This book is designed to address this shortcoming. It is divided into four units, each targeting activities that a software engineer will likely be involved in within industry. These areas are: attack vectors, code hardening, privacy, and social engineering. Each topic is explored from a theoretical and a practical-application standpoint. This text will equip students to make knowledgeable security decisions, be productive members of a security review team, and write code that protects a user's information assets.

Chapman and Hall/CRC

Market: Information Technology

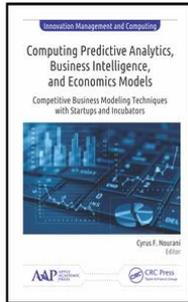
November 2018: 8-1/2 x 11: 344pp

Hb: 978-1-138-58382-5: **\$69.95**

eBook: 978-0-429-50647-5

* For full contents and more information, visit: www.crcpress.com/9781138583825**Computing Predictive Analytics, Business Intelligence, and Economics**

Modeling Techniques with Start-ups and Incubators

Edited by **Cyrus F. Nourani***Series: Innovation Management and Computing*

This volume brings together research and system designs that address the scientific basis and the practical systems design issues that support areas ranging from intelligent business interfaces and predictive analytics to economics modeling. The digitization implications of these many new applications are described and explored in this informative volume.

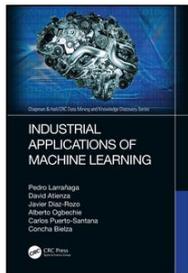
Apple Academic Press

Market: Computation

December 2018: 6 x 9: 275pp

Hb: 978-1-771-88729-8: **\$149.95**

eBook: 978-0-429-46546-8

* For full contents and more information, visit: www.crcpress.com/9781771887298**Industrial Applications of Machine Learning**

Pedro Larrañaga, Universidad Politécnica de Madrid, Spain, **Alberto Ogbechie**, Technical University of Madrid, Spain, **Javier Diaz-Rozo**, **David Atienza**, Technical University of Madrid, Spain, **Concha Bielza**, Technical University of Madrid, Spain and **Carlos Esteban Puerto-Santana**

Series: Chapman & Hall/CRC Data Mining and Knowledge Discovery Series

Industrial Applications of Machine Learning shows how machine learning can be applied to address real-world problems in the fourth industrial revolution, and provides the required knowledge and tools to empower readers to build their own solutions based on theory and practice. The book introduces the fourth industrial revolution and its current impact on organizations and society. It explores machine learning fundamentals, and includes four case studies that address a real-world problems in the manufacturing or logistics domains, and approaches machine learning solutions from an application-oriented point of view.

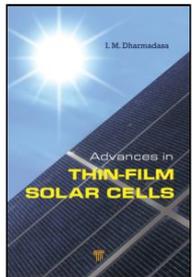
CRC Press

Market: Computer Science & Engineering

November 2018: 6-1/8 x 9-1/4: 344pp

Hb: 978-0-815-35622-6: **\$129.95*** For full contents and more information, visit: www.crcpress.com/9780815356226

Advances in Thin-Film Solar Cells



I. M. Dharmadasa, Sheffield Hallam University, UK

This book concentrates on the latest developments in our understanding of solid-state device physics. The material presented is mainly experimental and based on CdTe thin-film solar cells. It extends these new findings to CIGS thin-film solar cells and presents a new device design based on graded bandgap multilayer solar cells. This design has been experimentally tested using the well-researched GaAs/AlGaAs system and initial devices have shown impressive device parameters. These devices are capable of absorbing all radiation (UV, visible, and infra-red) within the solar spectrum and combines "impact ionization" and "impurity photovoltaic" effects.

The improved device understanding presented in this book

should impact and guide future device design and low-cost thin-film solar panel manufacture.

Pan Stanford

Market: Clean Technologies

September 2012: 6 x 9: 250pp

Hb: 978-9-814-31607-1: **\$160.00**

eBook: 978-9-814-36412-6

* For full contents and more information, visit: www.crcpress.com/9789814316071

New Edition Forthcoming in 2019

TEXTBOOK · READER

Air Pollution Control

Fundamentals and Applications

Edited by **Jeff Kuo**, California State University, Fullerton, USA

Series: *Fundamentals of Environmental Engineering*

Air pollution control and air quality engineering are some of the key subjects in any environmental engineering curriculum. This book will cover topics that are fundamental to pollution control engineers and professionals, including air pollution and its management through regulatory approaches, calculating and estimating emissions, and applying control technologies for different forms of pollutants and emission characteristics for several key industries. In addition, it will include topics that address issues such as fugitive component leak detection and repair, odor containment and control, greenhouse gas emissions, and indoor air pollution, which are often not found in other similar books.

CRC Press

Market: Engineering - Environmental

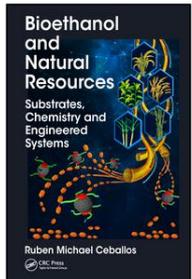
November 2018: 6-1/8 x 9-1/4: 368pp

Hb: 978-1-138-03204-0: **\$119.95**

* For full contents and more information, visit: www.crcpress.com/9781138032040

Bioethanol and Natural Resources

Substrates, Chemistry and Engineered Systems



Ruben Michael Ceballos, University of Arkansas, Arkansas USA.

Bioethanol and Natural Resources: Substrates, Chemistry and Engineered Systems provides a comprehensive review of feedstocks, physiochemical and biological pretreatments, molecular substrates, cellulolytic and ligninolytic enzymes, and advanced technologies for producing bioethanol.

CRC Press

Market: Environmental Science

November 2017: 6-1/8 x 9-1/4: 202pp

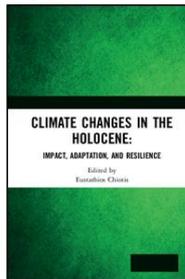
Hb: 978-1-498-77041-5: **\$169.95**

eBook: 978-1-498-77049-1

* For full contents and more information, visit: www.crcpress.com/9781498770415

Climate Changes in the Holocene:

Impacts and Human Adaptation



Edited by **Eustathios Chiotis**, National Institute of Geological Research, Greece

Palaeoclimatology is the study of past climates and climate change, and uses a variety of methods to obtain data preserved within rocks, sediments, ice, tree rings, and shells and other matter. Studies of past changes in the environment and biodiversity can reflect on the current state of the environment, the impacts of climate on mass extinctions, adaptations, migrations, etc. This book focuses on the Holocene Epoch (approximately 11,700 years ago to the present day), and shows how climate changes can be reliably correlated with archaeological evidence. It will examine the impact of climate changes on humans and civilization through case studies from

various places, periods, and climates.

CRC Press

Market: Environmental Science

November 2018: 7 x 10: 408pp

Hb: 978-0-815-36593-8: **\$199.95**

eBook: 978-1-351-26024-4

* For full contents and more information, visit: www.crcpress.com/9780815365938

Dioxin

Environmental Fate and Health/Ecological Consequences

Edited by **Sudarshan Kurwadkar**, California State University - Fullerton, USA, **Prabir Mandal** and **Shivani Soni**, Department of Biological Science, California State University, Fullerton, CA, USA

The book provides a holistic understanding of the compound dioxin, an organic pollutant which is highly toxic to humans and animals alike. Exposure to dioxin can occur through various environmental matrices. This handbook presents an in-depth toxicological profile and human health consequences, as well as various routes and exposure pathways of dioxin and dioxin-like compounds. Given the magnitude of its spread and toxicity it is imperative to document the current state of scientific know-how, which this book essentially does, by bringing together experts from a variety of disciplines ((bio)chemistry, toxicology, environmental health/engineering) to disseminate their most recent findings.

CRC Press

Market: Environmental Engineering

December 2018: 625pp

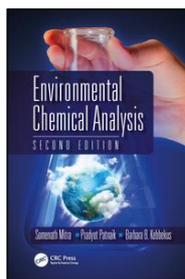
Hb: 978-1-138-04724-2: **\$169.95**

eBook: 978-1-315-17096-1

* For full contents and more information, visit: www.crcpress.com/9781138047242

2nd Edition · TEXTBOOK · READER

Environmental Chemical Analysis



S. Mitra, New Jersey Institute of Technology, Newark, USA, **Pradyot Patnaik**, New Jersey Institute of Technology, Newark, USA and **B.B. Keccak**, New Jersey Institute of Technology, Newark, USA

Environmental Chemical Analysis provides an explanation of analytical instrumentation methods for students without a background in analytical chemistry. This second edition features expanded material on sample preparation and quality assurance and control. It also includes new chapters on biological analysis and analysis of environmental particulates. It brings together sampling, sample preparation, and analytical techniques necessary for environmental applications, demonstrated through case studies of actual environmental measurement protocols.

CRC Press

August 2018: 6 x 9: 427pp

Hb: 978-1-138-60409-4: **\$229.95**

Pb: 978-0-849-33838-0: **\$89.95**

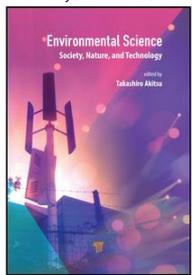
eBook: 978-0-429-45820-0

Prev. Ed Pb: 978-0-751-40456-2

* For full contents and more information, visit: www.crcpress.com/9780849338380

Environmental Science

Society, Nature, and Technology



Takashi Akitsu

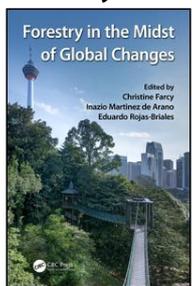
This book presents the current aspects of environmental issues in view of chemical processes particularly with respect to two facets: social sciences along with chemistry and natural sciences. The former facet explores the environmental economics and policies along with chemical engineering or green chemistry and the latter the various fields of environmental studies.

Pan Stanford

Market: Environmental Engineering
September 2018: 6 x 9: 250pp
Hb: 978-9-814-77496-3: **\$149.95**
eBook: 978-0-429-46823-0

* For full contents and more information, visit: www.crcpress.com/9789814774963

Forestry in the Midst of Global Changes



Edited by Christine Farcy, Eduardo Rojas-Brales and Inazio Martinez de Arano, Head of EFIMED, European Forest Institute

Forestry is an important foundation of the global economy. Today, forestry is a human-dominated ecosystem and as such it faces the many challenges that come with recent changes in urbanization and globalization. This book aims to explain human relations with forest resources from social and political points of view, bringing together the economic, social, and scientific concerns. The focus will be on the impacts of the societal processes in forest management practices across the world highlighting differences in cultural backgrounds and political issues. It will provide a contemporary assessment that is highly

relevant and unique.

CRC Press

Market: Environmental Science
October 2018: 6-1/8 x 9-1/4: 432pp
Hb: 978-1-138-19708-4: **\$189.95**
eBook: 978-1-315-28237-4

* For full contents and more information, visit: www.crcpress.com/9781138197084

3rd Edition · NEW EDITION

Indoor Air Quality

The Latest Sampling and Analytical Methods, Third Edition

Kathleen Hess-Kosa, Omega Environmental Consulting, Inc. TX, USA

This is a practical, user-friendly guide to the identification and assessment of indoor air contaminants that contribute to building-related illness in commercial buildings, institutions, and residences. The third edition covers basic concepts and details various approaches and up-to-date analytical methods, and it addresses some of the more recent, as well as less common, concerns on air pollutants. All chapters will be updated and also includes one completely new chapter on Inhalable Airborne Particles. All updates adhere to the latest National Ambient Air Quality Standards and other active standards.

CRC Press

Market: Environmental Science
January 2019: 6-1/8 x 9-1/4: 352pp
Hb: 978-1-138-30661-5: **\$159.95**
eBook: 978-1-315-09818-0

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Information and Communication Technology for Sustainable Development

Cesar Marolla, Consultant, Lancaster, CA

Information and communication technology (ICT) is fundamental for monitoring climate change and also for transitioning toward sustainable economies. This book highlights the role ICTs can have in mitigating numerous global risks. It offers the first integrated approach to better managing infrastructures with more consistent on-time, on-target delivery of services. Through practical examples, the book presents better technology practices to innovate processes and operations, and implement faster integration of new technologies into business systems. Focused on sustainability, it addresses a strategic approach to cope with global environmental risks and also promote economic growth.

CRC Press

Market: Environmental Science
December 2018: 6-1/8 x 9-1/4: 288pp
Hb: 978-1-138-48653-9: **\$149.95**

* For full contents and more information, visit: www.crcpress.com/9781138486539

TEXTBOOK · READER

Introduction to Environmental Data Analysis for Scientists and Engineers

Ralph R.B. Von Frese and John W. Olesik

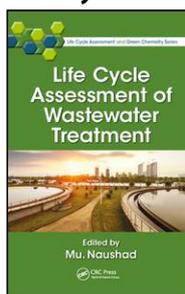
This hands-on textbook introduces basic concepts of modern digital data analysis and graphics including numerical/graphical calculus, measurement units and dimensional analysis, non-statistical and statistical error analysis, etc. It emphasizes array-based or matrix inversion and spectral analysis using the fast Fourier transform (FFT) that dominates modern data analysis. It is comprehensive and better suited for student exploration efforts using modern equation solving software like MATLAB®, Mathematica, MathCad, etc. This textbook is focused on the basic mathematical methods, which distinguishes it from the rest of software focused textbooks.

CRC Press

Market: Environmental Science
February 2019: 6-1/8 x 9-1/4: 350pp
Hb: 978-1-138-62778-9: **\$129.95**

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Life Cycle Assessment of Wastewater Treatment



Edited by Mu. Naushad, King Saud University, Kingdom of Saudi Arabia

Series: *Life Cycle Assessment and Green Chemistry Series*

Life Cycle Assessment of Wastewater Treatment addresses in detail the required in-depth life cycle assessment of wastewater treatment. This is to meet the special demands placed upon wastewater treatment processes, due to both the limited quantity and often low quality of water supplies. Wastewater management clearly plays a central role in achieving future water security in a world where water stress is expected to increase. Life cycle assessment (LCA) can be used as a tool to evaluate the environmental impacts associated with wastewater treatment and potential improvement options.

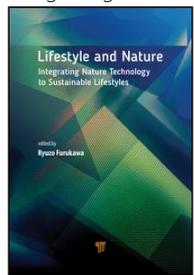
CRC Press

Market: Water Science & Engineering
March 2018: 6-1/8 x 9-1/4: 306pp
Hb: 978-1-138-05517-9: **\$169.95**
eBook: 978-1-315-16582-0

* For full contents and more information, visit: www.crcpress.com/9781138055179

Lifestyle and Nature:

Integrating Nature Technology to Sustainable Lifestyles



Edited by Ryuzo Furukawa, Yuko Suto, Emile H. Ishida and Takeshi Yamauchi

In this book, we introduce Bio-TRIZ and ontology engineering to match and find technologies needed for spiritually affluent lifestyles. This book provides many examples of Japanese cities that conducted lifestyle design projects based on nature technology. The book is a great reference for graduate-level students of environmental studies and engineering and for researchers in innovation, social science, engineering, and public policy, especially those with an interest in lifestyle change for a sustainable society.

Pan Stanford

Market: Clean and Sustainable Processes

September 2018: 6 x 9: 320pp

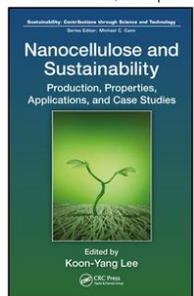
Hb: 978-9-814-77462-8: \$149.95

eBook: 978-1-315-14687-4

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Nanocellulose and Sustainability

Production, Properties, Applications, and Case Studies



Edited by Koon-Yang Lee, Imperial College London, United Kingdom

Series: Sustainability: Contributions through Science and Technology

Nanocellulose and Sustainability: Production, Properties, Applications, and Case Studies provides a comprehensive overview of nanocellulose production, nanocellulose properties and nanocellulose in selected applications.

CRC Press

Market: Materials Science

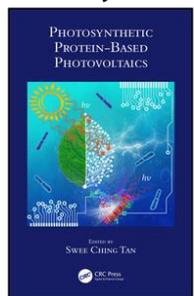
January 2018: 6-1/8 x 9-1/4: 300pp

Hb: 978-1-498-76103-1: \$199.95

eBook: 978-1-351-26292-7

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Photosynthetic Protein-Based Photovoltaics



Edited by Swee Ching Tan, National University of Singapore

Photosynthetic protein complexes have an overall quantum yield close to 100%. Photovoltaic devices using protein complexes can provide an economical alternative to existing solar cells. This book explains how to build and improve the efficiency of protein solar energy conversion devices based on the present understanding of the photosynthetic proteins.

CRC Press

Market: Energy & Clean Technology

September 2018: 6-1/8 x 9-1/4: 239pp

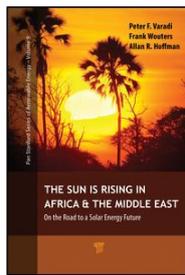
Hb: 978-1-498-72489-0: \$129.95

eBook: 978-1-315-12024-9

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The Sun Is Rising in Africa and the Middle East

On the Road to a Solar Energy Future



Edited by Peter F. Varadi, Frank Wouters and Allan R. Hoffman

Series: Pan Stanford Series on Renewable Energy

An energy transition that took its first tentative steps in the latter part of the 20th century is now unfolding rapidly. We are transitioning from dependence on ever-scarcer sources of fossil fuels to an era of unlimited, clean, and increasingly less expensive energy brought about by modern technology. Both Africa and the Middle East are blessed with enormous solar energy resources, which are just beginning to be tapped. While the share of solar electricity in Africa and the Middle East is still very small, it is expected that these areas will become the next large markets for solar electric systems. This book provides a

comprehensive review of why and how this will happen.

Pan Stanford

Market: Material Science/Clean Technology

March 2018: 6 x 9: 256pp

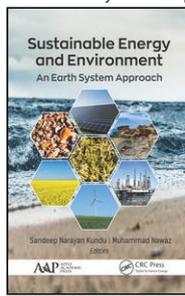
Pb: 978-9-814-77489-5: \$49.95

eBook: 978-1-351-00732-0

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Sustainable Energy and Environment

An Earth System Approach



Edited by Sandeep Narayan Kundu and Muhammad Nawaz

Sustainable Energy and Environment: An Earth System Approach provides a holistic understanding of earth, energy, and the environment through a careful selection of invited chapters. The book looks at Earth from the perspective of a livable planet and elaborates on surface and subsurface processes and the various energy cycles where energy is transformed and stored in the various spheres. The chapters discuss the interactions between the different parts of Earth—how energy is exchanged between the atmosphere, hydrosphere, biosphere, and geosphere, and how impacts it the environment in which we live.

Apple Academic Press

Market: Earth Science

February 2019: 6 x 9: 340pp

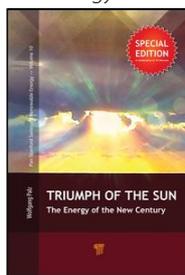
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eBook: 978-0-429-43010-7

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The Triumph of the Sun

The Energy of the New Century



Wolfgang Palz

Authored by Wolfgang Palz, an independent expert on energy matters and the economy, this book presents his views on a solar revolution to which he contributed. It is not about ecological dreams and wishful thinking for a better world but a report about what happened, in facts and figures. Beginning with fundamentals, the book discusses the key role of the Sun for nature and life. It details what happened when the endeavour for a cleaner world began and elaborates the efforts of the people who brought about the change.

Pan Stanford

Market: Renewable Energy

August 2018: 6 x 9: 210pp

Hb: 978-9-814-80006-8: \$49.95

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Suzanne Bell, West Virginia University, Morgantown, USA

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CRC Press

Market: Forensics & Criminal Justice

December 2018: 8-1/2 x 11: 640pp

eBook: 978-1-315-17033-6

Pack - Book and Ebook: 978-1-138-04812-6: **\$89.95**

Prev. Ed Pack - Book and Ebook: 978-1-439-85383-2

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Howard Harris, University of New Haven, West Haven, Connecticut, USA and Henry Lee, University of New Haven, Connecticut, USA University of New Haven, West Haven, Connecticut, USA

This Second Edition of *Introduction to Forensic Science and Criminalistics* presents the practice of forensic science from a broad viewpoint. The Second Edition is fully updated to cover the latest scientific methods of evidence collection, evidence analytic techniques, and the application of the analysis results to an investigation and use in court. This includes coverage of physical evidence, evidence collection, crime scene processing, pattern evidence, fingerprint evidence, questioned documents, DNA and biological evidence, drug evidence, toolmarks and firearms, arson and explosives, chemical testing, and a new chapter of computer and digital forensic evidence.

CRC Press

Market: Forensics & Criminal Justice

December 2018: 8 x 10: 438pp

Hb: 978-1-498-75796-6: **\$89.95*** For full contents and more information, visit: www.crcpress.com/9781498757966

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Fundamentals of Fingerprint Analysis, Second Edition

Hillary Moses Daluz

Fundamentals of Fingerprint Analysis, Second Edition provides an understanding of the historical background of fingerprint evidence, and follows it all the way through to illustrate how it is utilized in the courtroom. New coverage to this edition includes such topics as the biometrics and AFIS systems, physiology and embryology of fingerprint development in the womb, digital fingerprint record systems, new and emerging chemical reagents, varieties of fingerprint powders, and more. Fundamentals of Fingerprint Analysis, Second Edition stands as the most comprehensive introductory textbook on the market.

CRC Press

Market: Forensics & Criminal Justice

October 2018: 7 x 10: 353pp

Hb: 978-1-138-48745-1: **\$79.95**

eBook: 978-1-351-04320-5

Prev. Ed Hb: 978-1-466-59797-6

* For full contents and more information, visit: www.crcpress.com/9781138487451

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Scientific Protocols for Fire Investigation, Third Edition

John J. Lentini, Scientific Fire Analysis, LLC, Big Pine Key, Florida, USA

Series: Protocols in Forensic Science

Scientific Protocols for Fire Investigation, Third Edition focuses on the practical application of fundamental scientific principles to determine the causes of fires. Since the publication of the first edition 2006, the book has been updated extensively to reflect the rapidly evolving best-practices in the field—driven by new discoveries about fire behavior. Fire investigators, insurance adjusters, lawyers, forensic chemists, and fire/life safety professionals will find this a timely and invaluable resource.

CRC Press

Market: Fire Science/Forensics

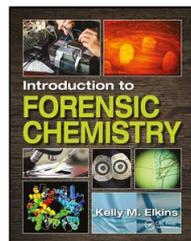
October 2018: 8 x 10: 586pp

Hb: 978-1-138-03701-4: **\$220.00**Pb: 978-1-138-03702-1: **\$94.95**

eBook: 978-1-315-17809-7

* For full contents and more information, visit: www.crcpress.com/9781138037021

TEXTBOOK · READER

Introduction to Forensic Chemistry

Kelly M. Elkins, Towson University, Chemistry Department, Maryland, USA

Introduction to Forensic Chemistry is the perfect balance of testing methods and application. Coverage is neither too simplistic, nor overly advanced, making the book ideal for use in both undergraduate and graduate courses. It introduces chemical tests, spectroscopy, advanced spectroscopy, and chromatography to students. The second half addresses applications and methods to analyze and interpret controlled substances, trace evidence, questioned documents, firearms, explosives, environmental contaminants, toxins, and other topics.

The book looks at innovations in the field over time including the latest development of new discernible chemical reactions, instrumental tools, methods, and more.

CRC Press

Market: Chemistry/Forensic Science

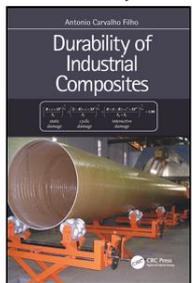
September 2018: 8 x 10: 324pp

Hb: 978-1-498-76310-3: **\$99.95**

eBook: 978-0-429-45453-0

* For full contents and more information, visit: www.crcpress.com/9781498763103

Durability of Industrial Composites



Antonio Carvalho Filho

This book guides engineers tasked to predict the durability of any laminate in any chemical environment subjected to any loading—cyclic, static, or a combination thereof. It focuses on long-term in-service durability and provides quantitative answers to all durability issues of composite materials in industrial service. It identifies eight modes of long-term laminate failure: four are environment-dependent and four are load-dependent. The solution of environment-dependent durability problems requires no new hypotheses while load-dependent durability analysis requires rejection of old concepts. The book proposes several new concepts and assumptions to solve load-dependent durability issues.

CRC Press

Market: Materials Science

October 2018: 6-1/8 x 9-1/4: 412pp

Hb: 978-1-138-33829-6: \$159.95

eBook: 978-0-429-44181-3

* For full contents and more information, visit: www.crcpress.com/9781138338296

Engineered Repairs of Composite Structures

Rikard Benton Heslehurst, University of New South Wales, Canberra, Australia

This book provides a detailed discussion, analysis, and procedure for effective and efficient repair design. It discusses the identification of damage types and the effect on structural integrity in composite structures. This leads to the design of a repair scheme that suits the restoration of the structural integrity and damage tolerance. The book also discusses the application of the repair and what is needed in forming the composite repair to meet the engineering design requirements.

CRC Press

Market: Materials Science

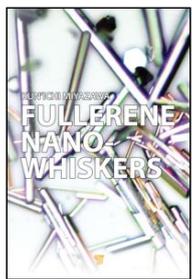
April 2019: 6-1/8 x 9-1/4: 232pp

Hb: 978-1-498-72626-9: \$159.95

eBook: 978-1-498-72627-6

* For full contents and more information, visit: www.crcpress.com/9781498726269

Fullerene Nanowhiskers



Edited by Kun'ichi Miyazawa, National Institute for Materials Science, Tsukuba, Ibaraki, Japan, Masaru Tachibana, Yokohama City University, Japan, Tadahiko Mashino, Keio University, Tokyo, Japan, Tokushi Kizuka, University of Tsukuba, Ibaraki, Japan and Yuichi Ochiai, Chiba University, Japan

This book provides detailed knowledge about fullerene nanowhiskers and the related low-dimensional fullerene nanomaterials. It introduces tubular nanofibers made of fullerenes, fullerene nanotubes, and single crystalline thin film made of C_{60} , called fullerene nanosheet. This is the first publication to feature the fullerene nanowhiskers made of C_{60} and C_{60} derivatives. The synthetic method (liquid-liquid interfacial precipitation method) and the physical and chemical properties are shown for the fullerene nanowhiskers, including their electronic device application.

Pan Stanford

Market: Materials Science

October 2011: 6 x 9: 242pp

Hb: 978-9-814-24185-4: \$190.00

eBook: 978-9-814-26763-2

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New Edition Forthcoming in 2019

Functional Materials

Advances and Applications in Energy Storage and Conversion

Edited by Toshio Naito

The world is currently facing the urgent and demanding problem of saving and utilizing energy as efficiently as possible. Materials science, where chemistry meets physics, has garnered a great deal of attention because of its versatile techniques for designing and producing new, desired materials enabling energy storage and conversion. This book is a comprehensive survey of the research on such materials. Unlike a monograph or a review book, it covers a wide variety of compounds, details diverse study methodologies, and spans different scientific fields.

Pan Stanford

Market: Materials Science

October 2018: 6 x 9: 480pp

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eBook: 978-0-429-46813-1

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2nd Edition • TEXTBOOK • READER

Fundamentals of Soft Matter Science, Second Edition

Linda S. Hirst, University of California, Merced, USA

This revised edition continues to provide the most approachable introduction to the structure, characteristics, and everyday applications of soft matter. It begins with a completely rewritten overview of the underlying physics and chemistry. Subsequent chapters address the different classes of these materials, from liquid crystals to surfactants, polymers, colloids, and biomaterials, with vivid, full-color illustrations throughout. There are new worked examples, extensive new problems, deeper mathematical treatment, and computational results, in addition to several new sections on key topics such as active matter and neutron scattering.

CRC Press

Market: Physics

February 2019: 6-1/8 x 9-1/4: 352pp

Hb: 978-1-138-72478-5: \$149.95

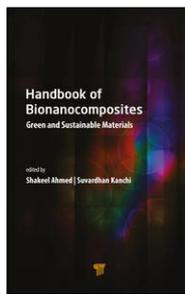
Pb: 978-1-138-72444-0: \$79.95

eBook: 978-1-315-19238-3

Prev. Ed Pb: 978-1-439-82775-8

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Handbook of Bionanocomposites



Edited by Shakeel Ahmed, Department of Chemistry, Government Degree College Mendhar, Jammu and Kashmir, India and Suvadhan Kanchi, Department of Chemistry, Durban University of Technology, Durban, South Africa

This book focuses on recent developments in the field of green biopolymers and nanomaterials, especially bionanostructured materials and bionanocomposites. The synthesis and characterization of bionanomaterials, as well as their incorporation into polymer matrixes, and their biological applications are discussed in detail. Highlights include a detailed discussion of bionanostructured material and bionanocomposite synthesis, food packing reviews, water remediation, heavy metal ion adsorption from wastewater, and other industrial

applications. The book is aimed at beginners in this field.

Pan Stanford

Market: Polymer Chemistry

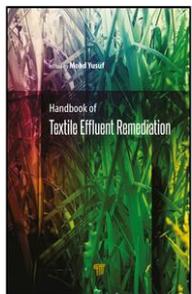
September 2018: 6 x 9: 318pp

Hb: 978-9-814-77482-6: \$179.95

eBook: 978-1-351-17068-0

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Handbook of Textile Effluent Remediation



Edited by **Mohd Yusuf**

Nowadays, textile units utilize a number of dyes, chemicals, reagents, and solvents to impart the desired quality to fabrics and generate a substantial quantity of effluents/contaminants, which cause severe environmental problems if disposed of without proper treatment. In view of several surveys carried out through research papers, books, technical articles, and general reports published in high repute academic societies, this book provides a detailed narration of the acceptable techniques/methods for treatment of textile wastewater, such as active ozonation, membrane filtration, and adsorption.

Pan Stanford

Market: Water Science/Remediation

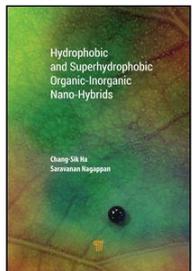
June 2018: 6 x 9: 434pp

Hb: 978-9-814-77490-1: **\$149.95**

eBook: 978-0-429-50547-8

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Hydrophobic and Superhydrophobic Organic-Inorganic Nano-Hybrids



Edited by **Chang-Sik Ha** and **Saravanan Nagappan**

This book provides details of hydrophobic and superhydrophobic surfaces and discusses methods of fabrication of these surfaces based on the organic-inorganic nanohybrids. It covers recent applications of these surfaces, especially in environmental and energy applications. It is very useful in understanding the surface property of various materials and their potential applications and is a valuable guide for graduate students and scientists who have a background in chemistry, chemical engineering, material science and engineering, nanotechnology, surface science and engineering, and industrial coating application areas.

Pan Stanford

Market: Materials Chemistry

March 2018: 6 x 9: 182pp

Hb: 978-9-814-77468-0: **\$149.95**

eBook: 978-1-351-20607-5

* For full contents and more information, visit: www.crcpress.com/9789814774680

Laser Precision Microprocessing of Materials

Edited by **A. G. Grigor'yants**, Bauman Moscow State Technical University, Moscow, **M. A. Kazaryan**, Russian Academy of Sciences, Moscow and **N. A. Lyabin**, Bauman Moscow State Technical University, Moscow

This reference focuses on the current state of fundamental research and industrial achievements in the field of precision laser processing of a wide range of metal, semiconductor and dielectric materials. The possibilities of microprocessing by pulsed nanosecond laser radiation and copper vapor laser systems are analyzed. Design and operation principles, ways to increase their efficiency and reliability, and a series of modern automated technological installations are described. The work will be of interest to specialists, engineers, students and graduate students working and studying in the field of laser technology and optics, laser and information technology.

CRC Press

Market: Physics

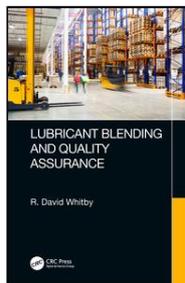
December 2018: 6-1/8 x 9-1/4: 430pp

Hb: 978-1-138-59454-8: **\$249.95**

eBook: 978-0-429-48877-1

* For full contents and more information, visit: www.crcpress.com/9781138594548

Lubricant Blending and Quality Assurance



Edited by **R. David Whitby**, Pathmaster Marketing, Ltd.

Blending lubricants that meet customers' demands requires much more than simply adding and stirring base oils and additives. This book offers an in-depth understanding of the management and operation of a lubricant blending plant. It discusses the need for correct ingredients of the right quality and precisely controlled quantity, testing of ingredients prior to blending, testing of finished products after blending, and storage and delivery of lubricants. It also describes the different types of equipment used to blend lubricants, provides guidance on how best to use this equipment, and offers tips and techniques to help to avoid problems.

CRC Press

Market: Engineering - Chemical

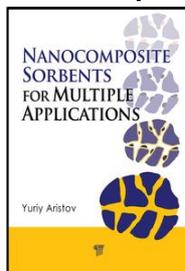
October 2018: 6-1/8 x 9-1/4: 290pp

Hb: 978-1-138-60593-0: **\$169.95**

eBook: 978-0-429-46675-5

* For full contents and more information, visit: www.crcpress.com/9781138605930

Nanocomposite Sorbents for Multiple Applications



Edited by **Yu I. Aristov**, Boreskov Institute of Catalysis, Novosibirsk, Russia

This book develops the concept of target-oriented synthesis and suggests tools for tailoring new adsorbent materials adapted to multiple practical applications. For example, by "nanotailoring" sorption properties, a new family of nanocomposite sorbents, "salt in nanoporous matrix", is presented. The text contains a survey of this new family, as well as the properties of nearly 50 new composite sorbents of water, alcohol, ammonia, and carbon dioxide. This data can be used in analyzing potential applications, including low-temperature heat storage and transformation, gas drying, and more.

Pan Stanford

Market: Materials Science

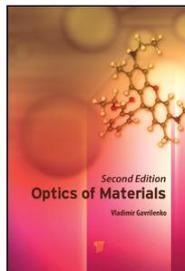
December 2018: 6 x 9: 350pp

Hb: 978-9-814-26750-2: **\$149.95**

* For full contents and more information, visit: www.crcpress.com/9789814267502

2nd Edition • NEW EDITION

Optics of Nanomaterials (Second Edition)



Edited by **Vladimir I. Gavrilenko**, Norfolk State University, Virginia, USA

This monograph is unique compared with its equivalents in the market in respect of its scope as it contains introductory sections to most of the important topics on nanomaterials optics. This feature broadens its readership from engineers and researchers, working in the field of materials science and optics, to lecturers, graduate students, and beginners who want to deepen their knowledge in nanomaterials optics. In this second edition, the text of all chapters is updated with the most recent developments in the field.

Pan Stanford

October 2018: 6 x 9: 400pp

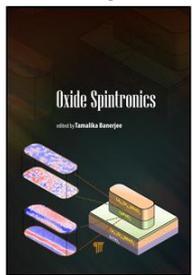
Hb: 978-9-814-77459-8: **\$179.95**

eBook: 978-0-203-71062-3

Prev. Ed. Hb: 978-9-814-24109-0

* For full contents and more information, visit: www.crcpress.com/9789814774598

Oxide Spintronics



Tamalika Banerjee

Oxide materials have been used in mainstream semiconductor technology for several decades and have served as important components. However, in recent decades, this material class has emerged in its own right as a potential contender for alternative technologies. The quest to understand the origin of their unparalleled physical properties and to find other emergent properties has been an active field of research that has united researchers with expertise in diverse fields from advanced microscopy to semiconductor technology. This book showcases the important scientific advances that have been made in this direction with new oxide material interfaces or with new techniques.

Pan Stanford

Market: Materials Science

January 2019: 6 x 9: 300pp

Hb: 978-9-814-77499-4: **\$149.95**

eBook: 978-0-429-46819-3

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Petroleum Fluid Phase Behavior

Characterization, Processes, and Applications

Raj Deo Tewari, Jaime Moreno Ortiz and Abhijit Y. Dandekar

Series: Emerging Trends and Technologies in Petroleum Engineering

This book deals with complex fluid characterization of oil and gas reservoirs, emphasizing the importance of PVT parameters for practical application in reservoir simulation and management. It covers modeling of PVT parameters, QA/QC of PVT data from lab studies, EOS modeling, PVT simulation and compositional grading and variation. It describes generation of data for reservoir engineering calculations in view of limited and unreliable data and techniques like downhole fluid analysis and photophysics of reservoir fluids. It discusses behavior of unconventional reservoirs, particularly for difficult resources like shale gas, shale oil, coalbed methane, reservoirs, heavy and extra heavy oils.

CRC Press

Market: Engineering - Chemical

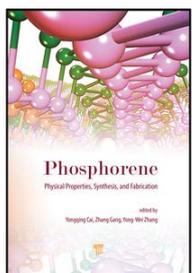
December 2018: 6-1/8 x 9-1/4: 392pp

Hb: 978-1-138-62638-6: **\$159.95**

eBook: 978-1-315-22880-8

* For full contents and more information, visit: www.crcpress.com/9781138626386

Phosphorene: Physical Properties, Synthesis, and Fabrication



Edited by Yongqing Cai, Gang Zhang and Yong-Wei Zhang

This book is the first attempt to systematically present the knowledge and research progress of phosphorene, another elemental 2D material that can be exfoliated by mechanical or liquid methods as the intensively studied graphene. The book provides a comprehensive overview of the synthesis, growth, characterization, and applications of phosphorene. It also compiles cutting-edge research in the related field with respect to thermal conduction, transistors, and electrochemical applications and encompasses the intrinsic properties.

Pan Stanford

October 2018: 6 x 9: 400pp

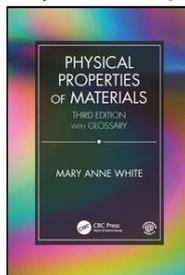
Hb: 978-9-814-77464-2: **\$149.95**

eBook: 978-0-203-71061-6

* For full contents and more information, visit: www.crcpress.com/9789814774642

3rd Edition · TEXTBOOK · READER

Physical Properties of Materials, Third Edition



Mary Anne White, Dalhousie University, Halifax, Nova Scotia, Canada

The book focuses on the optical, thermal, electrical, magnetic and mechanical properties of materials. It introduces various materials via their properties and application of materials through tutorials via a companion website. In comparison with other textbooks it has broader coverage of physical properties and deep connections concerning the relationship between structure and origins of the properties. New topics include reference to the latest research topics in materials science and engineering, including boron nitride nanotubes, new cloaking technologies, new energy storage materials, and materials for renewable energy capture. It now features a glossary at the end of the book.

CRC Press

Market: Materials Science

October 2018: 6-1/8 x 9-1/4: 496pp

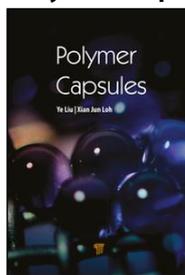
Hb: 978-1-138-56917-1: **\$149.95**

Pb: 978-1-138-60510-7: **\$69.95**

eBook: 978-0-429-46826-1

* For full contents and more information, visit: www.crcpress.com/9781138605107

Polymer Capsules



Edited by Ye Liu and Xian Jun Loh

This book focuses on the current state of the art of polymer-based capsules. It discusses the fundamental knowledge of the formations and formulations and the properties and performances of typical polymers capsules, together with their applications. It can be used as a guiding tool to design and formulate polymer capsules for pharmaceutical and consumer-care products as well as nutrients and food products with improved performances.

Pan Stanford

Market: Materials Science

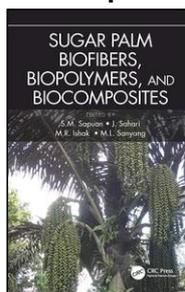
November 2018: 6 x 9: 300pp

Hb: 978-9-814-77460-4: **\$149.95**

eBook: 978-0-429-42873-9

* For full contents and more information, visit: www.crcpress.com/9789814774604

Sugar Palm Biofibers, Biopolymers, and Biocomposites



Edited by S.M. Sapuan, Universiti Putra Malaysia, Serdang, Selangor, J. Sahari, Universiti Malaysia Sabah, Kota Kinabalu, M.R. Ishak, Universiti Putra Malaysia, Serdang and M.L. Sanyang

Researchers are studying new ways to utilize resources derived from natural fibres such as sugar palm. This book covers fundamental processes to commercialized products of sugar palm. It offers original research on the properties and behavior of sugar palm's fibres, polymers and biocomposites. It covers mechanical, physical, thermal, chemical, environmental, morphological properties and optimal design of the sugar palm's fibres, polymers and biocomposites. The book also discusses innovative methods of fibre and composite properties

treatments and enhancements, potential and recent product developments from sugar palm.

CRC Press

Market: Materials Science

October 2018: 6-1/8 x 9-1/4: 12pp

Hb: 978-1-498-75302-9: **\$189.95**

eBook: 978-0-429-44392-3

* For full contents and more information, visit: www.crcpress.com/9781498753029

Applied Bohmian Mechanics

From Nanoscale Systems to Cosmology



Edited by **Xavier Oriols Pladevall**, Universitat Autònoma de Barcelona, Bellaterra, Spain and **Jordi Mompart**, Universitat Autònoma de Barcelona, Bellaterra, Spain

Most textbooks explain quantum mechanics as a story where each step follows naturally from the one preceding it. However, the development of quantum mechanics was exactly the opposite. It was a zigzagging route full of personal disputes where scientists were forced to abandon well-established classical concepts and to explore new and imaginative routes. This book demonstrates the huge practical utility of another of these routes in explaining quantum phenomena in various research fields. Bohmian mechanics — the formulation of the quantum theory pioneered by Louis de Broglie and David Bohm — offers an alternative mathematical formulation of quantum phenomena in terms of quantum trajectories. It sheds light on the limits and extensions of our present understanding of quantum mechanics toward other paradigms such as relativity or cosmology.

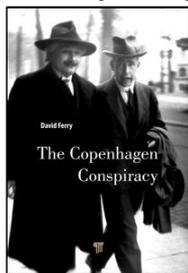
Pan Stanford

Market: Mathematical Physics
June 2012: 6 x 9: 600pp
Hb: 978-9-814-31639-2: **\$160.00**
eBook: 978-9-814-36410-2

* For full contents and more information, visit: www.crcpress.com/9789814316392

New Edition Forthcoming in 2019

The Copenhagen Conspiracy



David K. Ferry, School of Electrical, Computer, and Energy Engineering, Arizona State University, Tempe, AZ 85287-5706, USA

At the close of the nineteenth century, we stood on the threshold of one of the greatest periods of science, in which the entire world and understanding of science would be shaken to the core and greatly modified. This explosion of knowledge led ultimately to that same information revolution that we live in today. Planck and Einstein showed that light was not continuous but made of small corpuscles that today we call photons. Einstein changed the understanding of mechanics with his theory of relativity: airplanes became conceivable; radio and television blossomed; and the microelectronics industry, which drives most

of modern technology, came into being.

Pan Stanford

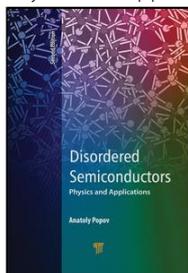
Market: Lasers, Optics & Photonics
September 2018: 6 x 9: 350pp
Hb: 978-9-814-77475-8: **\$79.95**
eBook: 978-1-351-20723-2

* For full contents and more information, visit: www.crcpress.com/9789814774758

2nd Edition · NEW EDITION

Disordered Semiconductors Second Edition

Physics and Applications



Edited by **Anatoly Popov**, Moscow Power Engineering Institute, Russia

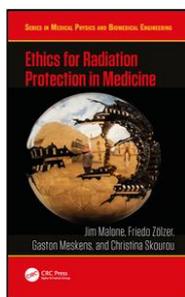
Devices based on disordered semiconductors have wide applications. It is difficult to imagine modern life without printers and copiers, LCD monitors and LCD TVs, optical discs, economical solar cells, and many other devices based on disordered semiconductors. However, nowadays books that discuss disordered (amorphous, nanocrystalline, microcrystalline) semiconductors focus, as a rule, on either physics of materials or physics of devices that are based on these materials. This textbook connects characteristic features of the atomic and electronic structures of disordered semiconductors and the device design process on the basis of these materials.

Pan Stanford

Market: Electrical Engineering
August 2018: 6 x 9: 328pp
Hb: 978-9-814-77437-6: **\$179.95**
eBook: 978-1-315-10042-5
Prev. Ed Hb: 978-9-814-24176-2

* For full contents and more information, visit: www.crcpress.com/9789814774376

Ethics for Radiation Protection in Medicine



Jim Malone, Trinity College Dublin, **Friedo Zölzer**, University of South Bohemia, Czech Republic, **Gaston Meskens** and **Christina Skourou**, St. Luke's Radiation Oncology Network
Series: Series in Medical Physics and Biomedical Engineering

This book surveys existing ethical frameworks for radiological protection and medical practice and provides the latest developments and new protocols in the field. It presents an approach to ethics in medical radiation protection rooted in the medical tradition, and alert to contemporary social expectations. It provides readers with a practical, ethical framework with which they can carry out safe and acceptable medical procedures, taking due account of the patients' concerns. This book will be an invaluable reference for medical physicists and practitioners,

in addition to researchers working within radiation protection and students studying the field.

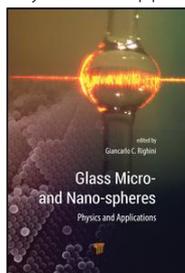
CRC Press

Market: Physics
November 2018: 6-1/8 x 9-1/4: 180pp
Hb: 978-1-138-55388-0: **\$99.95**
eBook: 978-1-315-14877-9

* For full contents and more information, visit: www.crcpress.com/9781138553880

Glass Micro- and Nanospheres

Physics and Applications



Giancarlo C. Righini

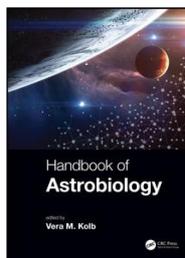
This monograph is unique compared with its equivalents in the market in respect of its scope as it contains introductory sections to most of the important topics on nanomaterials optics. This feature broadens its readership from engineers and researchers, working in the field of materials science and optics, to lecturers, graduate students, and beginners who want to deepen their knowledge in nanomaterials optics. In this second edition, the text of all chapters is updated with the most recent developments in the field.

Pan Stanford

Market: Lasers, Optics & Photonics
October 2018: 6 x 9: 300pp
Hb: 978-9-814-77463-5: **\$179.95**
eBook: 978-0-203-71063-0

* For full contents and more information, visit: www.crcpress.com/9789814774635

Handbook of Astrobiology



Edited by **Vera M. Kolb**, Department of Chemistry, University of Wisconsin-Parkside, USA

Astrobiology is the study of the origin, evolution, distribution, and future of life on Earth. This exciting and significant field of research also investigates the potential existence and search for extra-terrestrial life in the Solar System and beyond.

This is the first handbook in this burgeoning and interdisciplinary field. Edited by Vera Kolb, a highly respected astrobiologist, this comprehensive resource captures the history and current state of the field. Rich in information and easy to use, it assumes basic knowledge and provides answers to questions from practitioners and specialists in the field, as well as providing key references

for further study.

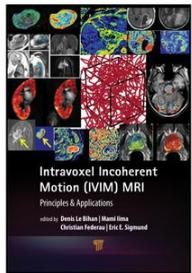
CRC Press

Market: Physics
December 2018: 8-1/2 x 11: 896pp
Hb: 978-1-138-06512-3: **\$399.95**
eBook: 978-1-315-15996-6

* For full contents and more information, visit: www.crcpress.com/9781138065123

Intravoxel Incoherent Motion (IVIM) MRI

Principles and Applications



Edited by **Denis Le Bihan, Mami Lima, Christian Federau** and **Eric E. Sigmund**

This book addresses a number of highly topical aspects of the field from leading authorities, introducing the concepts behind IVIM MRI, outlining related methodological issues, and summarizing its current usage and potential for clinical applications. It also presents future research directions, both in terms of methodological development and clinical application fields, extending to new, non-perfusion applications of IVIM MRI, such as virtual MR elastography.

Pan Stanford

Market: Medicine

October 2018: 6 x 9: 400pp

Hb: 978-9-814-80019-8: **\$179.95**

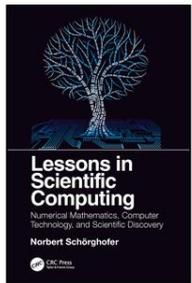
eBook: 978-0-429-42727-5

* For full contents and more information, visit: www.crcpress.com/9789814800198

TEXTBOOK · READER

Lessons in Scientific Computing

Numerical Mathematics, Computer Technology, and Scientific Discovery



Norbert Schorghofer, University of Hawaii, USA

Taking an interdisciplinary approach, this new book provides a modern introduction to scientific computing, exploring numerical methods, computer technology, and their interconnections, which are treated with the goal of facilitating scientific research across all disciplines. Each chapter provides an insightful lesson and viewpoints from several subject areas are often compounded within a single chapter. Written with an eye on usefulness, longevity, and breadth, Lessons in Scientific Computing will serve as a "one stop shop" for students taking a unified course in scientific computing, or seeking a single cohesive text spanning multiple courses.

CRC Press

Market: Physics

October 2018: 6-1/8 x 9-1/4: 190pp

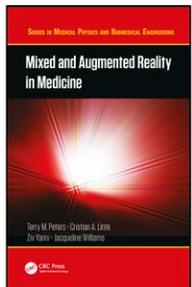
Hb: 978-1-138-07063-9: **\$224.99**

Pb: 978-1-138-07058-5: **\$69.95**

eBook: 978-1-315-10835-3

* For full contents and more information, visit: www.crcpress.com/9781138070585

Mixed and Augmented Reality in Medicine



Edited by **Terry M. Peters**, Robarts Research Institute, Western University, Canada, **Cristian A. Linte**, Ziv Yaniv, TAJ Technologies Inc, USA and **Jacqueline Williams**

Series: Series in Medical Physics and Biomedical Engineering

Augmented reality (AR) is transforming how we work, learn, play and connect with the world, and is now being introduced to the field of medicine, where it is revolutionising healthcare as pioneering virtual elements are being added to real images to provide a more compelling and intuitive view during procedures. This book is the first to review the area of augmented reality in medicine. Covering a range of examples of the use of AR in medicine, it explores its relevance to minimally-invasive interventions, how it can improve the accuracy of a procedure and reduce procedure time, and how it may be employed to reduce radiation risks.

CRC Press

Market: Physics

November 2018: 6-1/8 x 9-1/4: 324pp

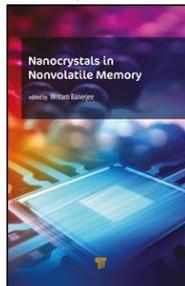
Hb: 978-1-138-06863-6: **\$149.95**

eBook: 978-1-315-15770-2

* For full contents and more information, visit: www.crcpress.com/9781138068636

Nanocrystals in Nonvolatile Memory

Nanocrystals in Nonvolatile Memory



Edited by **Writam Banerjee**, Key Laboratory of Microelectronic Devices & Integrated Technology, Institute of Microelectronics, Chinese Academy of Sciences, No. 3 Bei-Tu-Cheng West Road, Beijing 100029, China

In recent years, utilization of the abundant advantages of quantum physics, quantum dots, quantum wires, quantum wells, and nanocrystals has attracted considerable scientific attention in the field of nonvolatile memory. Nanocrystals are the driving element that have brought the nonvolatile flash memory technology to a distinguished height. However, new approaches are still required to strengthen this technology for future applications. This book details the methods of fabrication of nanocrystals and their application in baseline nonvolatile

memory and emerging nonvolatile memory technologies.

Pan Stanford

Market: Microelectronics

September 2018: 6 x 9: 534pp

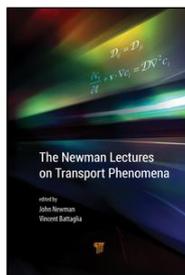
Hb: 978-9-814-77473-4: **\$199.95**

eBook: 978-1-351-20327-2

* For full contents and more information, visit: www.crcpress.com/9789814774734

TEXTBOOK · READER

The Newman Lectures on Transport Phenomena



John S. Newman, University of California, Berkeley, USA and **Vincent S. Battaglia**, Lawrence Berkeley National Laboratory, Berkeley, CA, USA

This book demonstrates how to solve for the velocity profile of the classic problems of fluid mechanics, starting with Navier–Stokes equation. It explains when it is appropriate to simplify a problem by neglecting certain terms through proper dimensional analysis. It covers concepts such as basic relations of fluid mechanics, microscopic interpretation of fluxes, concentrations and velocities in mixtures, multicomponent diffusion, entropy production and implications for transport properties, Lighthill's transformations, etc. It is as much a thesis on transport phenomena as it is in applied mathematics, and it

amply arms any serious problem solver with the tools to address any problem.

Pan Stanford

Market: Engineering

December 2018: 6 x 9: 250pp

Hb: 978-9-814-77427-7: **\$49.95**

eBook: 978-1-315-10829-2

* For full contents and more information, visit: www.crcpress.com/9789814774277

Noise in Spintronics

From Understanding to Manipulation



Farkhad Aliev and **Juan Pedro Cascales**

This book covers the main physical mechanisms and the different contributions (1/f noise, shot noise, etc.) behind electronic fluctuations in various spintronic devices. It presents the first comprehensive summary of fundamental noise mechanisms in both electronic and spintronic devices and is therefore unique in that aspect. The pedagogic introduction to noise is complemented by a detailed description of how one could set up a noise measurement experiment in the lab. A detailed discussion of unsolved problems and outlook make it an essential textbook for scientists and students desiring to exploit the information hidden in noise in both spintronics and conventional electronics.

Pan Stanford

Market: Nanoscience & Nanotechnology

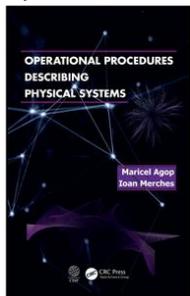
August 2018: 6 x 9: 338pp

Hb: 978-9-814-77434-5: **\$179.95**

eBook: 978-1-315-11088-2

* For full contents and more information, visit: www.crcpress.com/9789814774345

Operational Procedures Describing Physical Systems



Marciel Agop, Technical University "Gh.Asachi" Iasi, Romania and **Ioan Merches**, A.I.I. Cuza University, Iasi, Romania

The authors examine topics in modern physics and offer a unitary and original treatment of the fundamental problems of the dynamics of physical systems, as well as a description of the nuclear matter within a framework of general relativity. They show that some physical phenomena studied at two different resolution scales (e.g. microscale, cosmological scale), apparently with no connection between them, become compatible by means of the operational procedures, acting either as some "hidden" symmetries, or harmonic-type mappings. The book is addressed to the students, researchers and university/high school teachers working in the fields of mathematics, physics,

and chemistry.

CRC Press

Market: Physics

October 2018: 6-1/8 x 9-1/4: 210pp

Hb: 978-0-367-02440-6: **\$169.95**

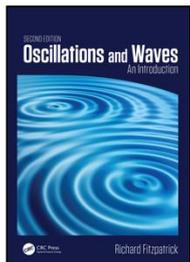
eBook: 978-0-429-39958-9

* For full contents and more information, visit: www.crcpress.com/9780367024406

2nd Edition · TEXTBOOK · READER

Oscillations and Waves

An Introduction, Second Edition



Richard Fitzpatrick, The University of Texas, Austin, USA

Emphasizing physics over mathematics, this popular, classroom-tested text helps advanced undergraduates acquire a sound physical understanding of wave phenomena. This second edition of *Oscillations and Waves: An Introduction* contains new widgets, animations in Python, and exercises, as well as updated chapter content throughout; continuing to ease the difficult transition for students between lower-division courses that mostly encompass algebraic equations and upper-division courses that rely on differential equations.

CRC Press

Market: Physics

July 2018: 7 x 10: 299pp

Hb: 978-1-138-48035-3: **\$225.00**

Pb: 978-1-138-47971-5: **\$89.95**

eBook: 978-1-351-06310-4

Prev. Ed Pb: 978-1-466-56608-8

* For full contents and more information, visit: www.crcpress.com/9781138479715

2nd Edition · TEXTBOOK · READER

Physics for Technology, Second Edition

With Applications in Industrial Control Electronics

Daniel H. Nichols, Matanuska-Susitna College, University of Alaska Anchorage, USA

Series: Textbook Series in Physical Sciences

This text provides an introduction to the important physics underpinning current technologies, highlighting key concepts in areas that include linear and rotational motion, energy, work, power, heat, temperature, fluids, waves, and magnetism. This revision reflects the latest technology advances, from smart phones to the Internet of Things, and all kinds of sensors. The author also provides more modern worked examples with useful appendices and laboratories for hands-on practice. There are also two brand new chapters covering sensors as well as electric fields and electromagnetic radiation as applied to current technologies.

CRC Press

Market: Physics

November 2018: 8 x 9: 344pp

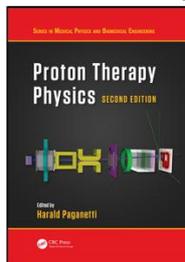
Hb: 978-0-815-38292-8: **\$149.95**

* For full contents and more information, visit: www.crcpress.com/9780815382928



2nd Edition · NEW EDITION

Proton Therapy Physics, Second Edition



Edited by **Harald Paganetti**, Massachusetts General Hospital and Harvard Medical School, Boston, USA

Series: Series in Medical Physics and Biomedical Engineering

Expanding on the highly successful first edition *Proton Therapy Physics* has been completely restructured and updated throughout. Suitable for both newcomers in medical physics and more seasoned specialists in radiation oncology, this book provides an in-depth overview of the physics of this radiation therapy modality, eliminating the need to dig through information scattered across medical physics literature.

The book explores the atomic and nuclear physics background necessary for understanding proton interactions with tissue, as

well as dosimetry, beam delivery, shielding aspects, computer simulations, detector systems and measuring techniques for reference dosimetry.

CRC Press

Market: Physics

November 2018: 7 x 10: 752pp

Hb: 978-1-138-62650-8: **\$149.95**

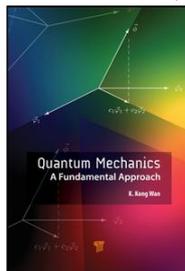
Prev. Ed Hb: 978-1-439-83644-6

* For full contents and more information, visit: www.crcpress.com/9781138626508

TEXTBOOK · READER

Quantum Mechanics

A Fundamental Approach



Kong Wan

Quantum mechanics is presented in six groups of postulates. A chapter is devoted to each group of postulates with a detailed discussion. Systems with superselection rules, and some conceptual issues such as quantum paradoxes and measurement, are also discussed. The book concludes with several illustrative applications, which include harmonic and isotropic oscillators, charged particle in external magnetic fields and the Aharonov–Bohm effect.

Pan Stanford

September 2018: 6 x 9: 700pp

Hb: 978-9-814-77465-9: **\$149.95**

eBook: 978-0-203-70241-3

* For full contents and more information, visit: www.crcpress.com/9789814774659

TEXTBOOK · READER

Statistical Physics of Dense Plasmas

Elementary Processes and Phase Transitions

Setsuo Ichimaru, Tokyo University Department of Physics

Series: Frontiers in Physics

This timely book gives a complete overview on the statistical mechanics and electrodynamics elucidating the physical processes in dense plasma systems. The author emphasizes laboratory-based experiments on metallic hydrogen, and gives detailed account of the plasma phenomena in various astrophysical settings. The coverage encompasses the intersection with condensed matter physics, atomic physics, nuclear physics, and astrophysics, including such key topics as phase transitions, transport, optical and nuclear processes. This essential resource discusses important topics such as metallic hydrogen, stellar and planetary magnetisms, pycnonuclear reactions, and gravitational waves.

Chapman and Hall/CRC

Market: Physics

December 2018: 7 x 10: 200pp

Hb: 978-1-138-36468-4: **\$189.95**

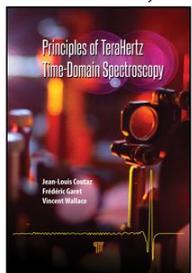
Pb: 978-1-138-36466-0: **\$79.95**

eBook: 978-0-429-43121-0

* For full contents and more information, visit: www.crcpress.com/9781138364660

Terahertz Spectroscopy

An Introductory Textbook



Jean-Louis Coutaz, Frederic Garet and Vincent P. Wallace

The book presents the basics of THz-TDS, including latest and interesting research on THz domain. It overviews the main classical far-infrared techniques and describes a variety of THz-TDS setups. It provides a comprehensive overview of the extraction procedures that are used to calculate the permittivity (i.e., the complex refractive index) or permeability spectral curves from recorded waveforms. It addresses the main THz-TDS practical cases: transmission, reflection, attenuated total reflection, polarimetry, ellipsometry, pump-and-probe, scattering, thin films, metamaterials, plasmonics, etc+.

Pan Stanford

Market: Spectroscopy

September 2018: 6 x 9: 650pp

Hb: 978-9-814-77456-7: \$179.95

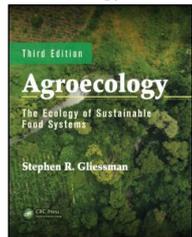
eBook: 978-0-203-70969-6

* For full contents and more information, visit: www.crcpress.com/9789814774567

3rd Edition - TEXTBOOK

Agroecology

The Ecology of Sustainable Food Systems, Third Edition



Stephen R. Gliessman, Professor Emeritus, University of California, Santa Cruz, USA

This new edition of the bestselling textbook for courses in agroecology or sustainable agriculture updates the issues facing the sustainability of food systems, especially the strong movement from the "second green revolution" of biotechnology, the continued consolidation of the agricultural and food industries, the conflict with biofuels, and today's historical record of hungry and undernourished people worldwide. The book presents recent research and provides new examples throughout, including innovative ways farms and other parts of

the food system have introduced new alternative technologies to improve sustainability.

CRC Press

Market: Agriculture

December 2014: 8-1/2 x 11: 405pp

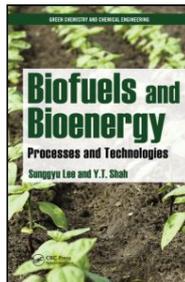
Hb: 978-1-439-89561-0: \$73.95

eBook: 978-1-498-72846-1

Prev. Ed Hb: 978-0-849-32845-9

* For full contents and more information, visit: www.crcpress.com/9781439895610**Biofuels and Bioenergy**

Processes and Technologies



Sunggyu Lee, Ohio University, Athens, USA and **Y.T. Shah**, Norfolk State University, Virginia, USA

Series: *Green Chemistry and Chemical Engineering*

Biofuels and bioenergy are critical topics underlying today's emphasis on sustainable energy sources. This volume provides a succinct introduction to this essential subject. After an overview, the book begins by discussing crop oils, biodiesel, and algae fuels. It examines ethanol from corn and from lignocelluloses. Next, the book explores fast pyrolysis and gasification of biomass. It describes the conversion of waste to biofuels, bioproducts, and bioenergy and concludes with a discussion of mixed feedstock.

CRC Press

Market: Chemical Engineering

August 2012: 6-1/8 x 9-1/4: 341pp

Hb: 978-1-420-08955-4: \$195.00

eBook: 978-1-420-08956-1

* For full contents and more information, visit: www.crcpress.com/9781420089554

5th Edition - TEXTBOOK - READER

Air Quality

Thad Godish, Ball State University, Muncie, Indiana, USA, **Wayne T. Davis**, University of Tennessee, Knoxville, USA and **Joshua S. Fu**, University of Knoxville, Tennessee, USA

The new edition of a bestseller includes updated information on topics the effect air quality such as global warming, global dimming, international issues associated with air quality and its regulation, atmospheric deposition, atmospheric chemistry, and health and environmental effects of atmospheric pollution. The fifth edition will include new graphics, images and an appended list of unit conversions. The chapters have been reorganized, new material has been added, less relevant material deleted, and new images added, particularly those from earth satellites.

CRC Press

Market: Environmental Engineering

August 2014: 6-1/8 x 9-1/4: 542pp

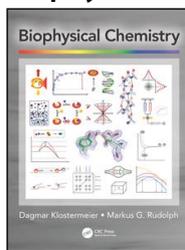
Hb: 978-1-466-58444-0: \$135.00

eBook: 978-1-466-58445-7

Prev. Ed Hb: 978-1-566-70586-8

* For full contents and more information, visit: www.crcpress.com/9781466584440

TEXTBOOK - READER

Biophysical Chemistry

Dagmar Klostermeier and **Markus G. Rudolph**, Roche Pharma Research & Early Development

This book is a comprehensive text for physical chemistry courses for biophysics, biochemistry, and the life sciences. It is rich in pedagogical features, containing boxes which provide additional background information on a specific topic, as well as those that provide numerous application examples. It describes a well-balanced spectrum of topics in a concise form, and bridges between theoretical concepts/methods and their applications to enable readers to directly transfer the treated topics to their laboratory projects.

CRC Press

Market: Physics

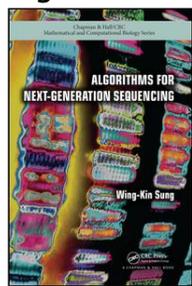
December 2017: 8-1/2 x 11: 770pp

Hb: 978-1-482-25223-1: \$99.95

eBook: 978-1-315-15691-0

* For full contents and more information, visit: www.crcpress.com/9781482252231

TEXTBOOK - READER

Algorithms for Next-Generation Sequencing

Wing-Kin Sung, National University of Singapore

Series: *Chapman & Hall/CRC Mathematical and Computational Biology*

Advances in sequencing technology have allowed scientists to study the human genome in greater depth and on a larger scale than ever before – as many as hundreds of millions of short reads in the course of a few days. But what are the best ways to deal with this flood of data?

Algorithms for Next-Generation Sequencing is an invaluable tool for students and researchers in bioinformatics and computational biology, biologists seeking to process and manage the data generated by next-generation sequencing, and as a textbook

or a self-study resource. In addition to offering an in-depth description of the algorithms for processing sequencing data, it also presents useful examples illustrating how the algorithms work.

Chapman and Hall/CRC

Market: Computer Science and Engineering

May 2017: 6-1/8 x 9-1/4: 350pp

Hb: 978-1-466-56550-0: \$79.95

eBook: 978-1-466-56551-7

* For full contents and more information, visit: www.crcpress.com/9781466565500**Care and Maintenance of Textile Products Including Apparel and Protective Clothing**

Rajkishore Nayak, RMIT University, Vietnam and **Saminathan Ratnapandian**, Ethiopian Institute of Textile and Fashion Technology (EITEX), Bahir Dar University, Ethiopia

Series: *Textile Institute Professional Publications*

This book describes methods of care and maintenance for textile products, focusing on types of laundering and dry-cleaning processes, chemicals, and equipment, while considering the environmental impacts of these procedures and green cleaning approaches. It details care labelling of garments, including electronic care labelling and instructions for different specialty textiles. Factors such as pilling, abrasion, snagging, color fading, and dimensional change are discussed. This book

also emphasizes care and maintenance of textiles used for protection from fire, bullets, cold weather, and chemicals

CRC Press

Market: Materials Science

March 2018: 6-1/8 x 9-1/4: 178pp

Hb: 978-1-138-56675-0: \$239.95

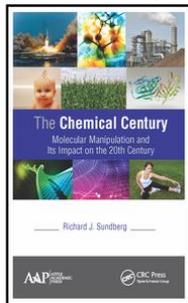
Pb: 978-1-138-56581-4: \$119.95

eBook: 978-1-315-12388-2

* For full contents and more information, visit: www.crcpress.com/9781138565814

The Chemical Century

Molecular Manipulation and Its Impact on the 20th Century



Richard J. Sundberg, University of Virginia, Charlottesville, USA

This fascinating new volume provides a comprehensive yet concise overview of the chemical aspects of some of the major innovations and changes that occurred during the twentieth century, relating chemical structures and properties to real-life applications. The author covers the important and consequential developments in chemistry and explains their everyday, real-life applications. The section Molecular Biology and Its Applications includes examples of the application of biotechnology and genetic engineering.

Apple Academic Press

Market: Chemistry

April 2017: 6-1/8 x 9-1/4: 744pp

Hb: 978-1-771-88366-5: \$149.95

eBook: 978-1-315-36626-5

* For full contents and more information, visit: www.crcpress.com/9781771883665

3rd Edition - 119 Volume Set

Clathrate Hydrates of Natural Gases



E. Dendy Sloan, Jr., Colorado School of Mines, Golden, USA, Carolyn A. Koh, Colorado School of Mines, Golden, CO, USA and Carolyn Koh, Colorado School of Mines, Golden, CO, USA

Series: *Chemical Industries*

This bestseller describes the clathrate hydrate compounds discovered in the past decade. Providing a balance between experimental and theoretical perspectives, this edition also incorporates two software programs that can be downloaded

from the CRC press website. It presents case studies on low dosage hydrate inhibitor prevention and hydrate drilling in nature, phase equilibrium data and kinetic models, and descriptions of the paradigm change in flow assurance to risk management. The book discusses the paradigm transition from hydrate reservoir assessment to reservoir production and summarizes the in situ conditions for hydrates in the permafrost and oceans.

CRC Press

September 2007: 752pp

Hb: 978-0-849-39078-4: \$265.00

eBook: 978-1-420-00849-4

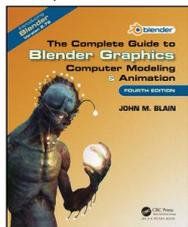
Prev. Ed Hb: 978-0-824-79937-3

* For full contents and more information, visit: www.crcpress.com/9780849390784

4th Edition

The Complete Guide to Blender Graphics

Computer Modeling & Animation, Fourth Edition



John M. Blain, Toormina, New South Wales, Australia

The Complete Guide to Blender Graphics: Computer Modeling and Animation is a unified learning manual for beginners and a reference for advanced users. The manual introduces the basic components of the Blender program with reference to the interface using written instruction in conjunction with illustrations and examples.

A K Peters/CRC Press

Market: Computer Game Development

September 2017: 7-1/2 x 9-1/4: 552pp

Hb: 978-1-138-08193-2: \$149.95

Pb: 978-1-138-08191-8: \$69.95

eBook: 978-1-315-11270-1

Prev. Ed Pb: 978-1-498-74645-8

* For full contents and more information, visit: www.crcpress.com/9781138081918



Compound Semiconductors

Physics, Technology, and Device Concepts



Pan Stanford

Market: Electronics

October 2017: 6 x 9: 294pp

Hb: 978-9-814-77407-9: \$149.95

eBook: 978-1-315-22931-7

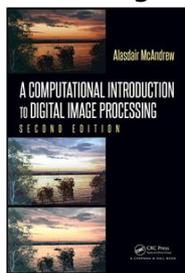
* For full contents and more information, visit: www.crcpress.com/9789814774079

Edited by Ferdinand Scholz, Ulm University, Germany

This book provides an overview over compound semiconductor materials and their technology. After presenting some theoretical background, the relevant material preparation technologies for bulk and thin layer epitaxial growth are described. Then it briefly discusses the electrical, optical and structural properties of these semiconductors, complemented by a description of the most popular respective characterization tools before more complex hetero and low-dimensional structures are discussed.

2nd Edition • TEXTBOOK • READER

A Computational Introduction to Digital Image Processing



Alasdair McAndrew, Victoria University, Melbourne, Australia

This bestseller explores the nature and use of digital images and shows how they can be obtained, stored, and displayed. Along with MATLAB, this second edition now includes GNU Octave and Python. Programs are written as modular as possible, allowing for greater flexibility, code reuse, and conciseness. This edition also contains new images, redrawn diagrams, and new discussions of edge-preserving blurring filters, ISODATA thresholding, Radon transform, corner detection, retinex algorithm, LZW compression, and other topics.

Chapman and Hall/CRC

Market: Engineering - Electrical

November 2015: 7 x 10: 535pp

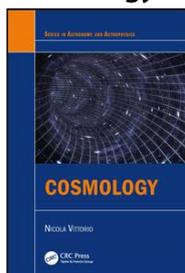
Hb: 978-1-482-24732-9: \$115.00

eBook: 978-1-482-24733-6

* For full contents and more information, visit: www.crcpress.com/9781482247329

TEXTBOOK • READER

Cosmology



Nicola Vittorio, Università di Roma Tor Vergata, Roma, Italy

Series: *Series in Astronomy and Astrophysics*

Modern cosmology has changed significantly over the years, from the discovery to the precision measurement era. The time is right for a fresh new textbook which captures the state-of-the-art in cosmology. Written by one of the world's leading cosmologists, this brand new, thoroughly class-tested textbook provides graduate and undergraduate students with coverage of the very latest developments and experimental results in the field. Prof. Nicola Vittorio shows what is meant by precision cosmology, from both theoretical and observational perspectives.

CRC Press

Market: Physics

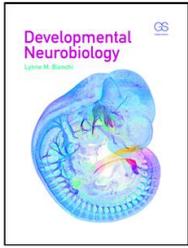
November 2017: 6-1/8 x 9-1/4: 428pp

Hb: 978-1-498-73132-4: \$89.95

eBook: 978-1-498-73133-1

* For full contents and more information, visit: www.crcpress.com/9781498731324

TEXTBOOK · READER

Developmental Neurobiology

Lynne Bianchi, Author of forthcoming Introduction to Developmental Neurobiology

Developmental Neurobiology tells the extraordinary process of neural development by showing how the scientific discoveries were made and how the hypotheses evolved over time. Each chapter explores the specific mechanisms of development while highlighting the key experiments and methods used to make those discoveries. This distinctive approach provides the essential facts while strengthening the reader's appreciation of the scientific method. Discussions of neurodevelopmental disorders and therapeutic approaches to them will captivate those

interested in the more clinical aspects of the field.

Garland Science

Market: Neuroscience

October 2017: 8 3/8 x 10 7/8: 346pp

Pb: 978-0-815-34482-7: \$99.00

eBook: 978-1-351-18947-7

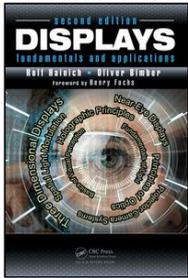
* For full contents and more information, visit:

www.garlandscience.com/product/isbn/9780815344827

2nd Edition

Displays

Fundamentals & Applications, Second Edition



Rolf R. Hainich, Hainich & Partner, Berlin, Germany and Oliver Bimber, Johannes Kepler University, Linz, Germany

In the extensive fields of optics, holography and virtual reality, technology continues to evolve. *Displays: Fundamentals and Applications, Second Edition* addresses these updates and discusses how real-time computer graphics and vision enable the application and displays of graphical 2D and 3D content.

Perfect for the student looking to sharpen their developing skill or the master refining their technique, Rolf Hainich and Oliver Bimber help the reader understand the basics of optics, light modulation, visual perception, display technologies, and computer-generated holography

A K Peters/CRC Press

Market: Computer Science & Engineering

December 2016: 7 x 10: 600pp

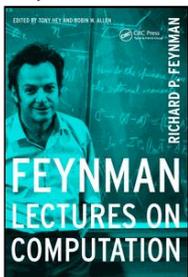
Hb: 978-1-498-76568-8: \$125.00

eBook: 978-1-315-36740-8

Prev. Ed Hb: 978-1-568-81439-1

* For full contents and more information, visit: www.crcpress.com/9781498765688

TEXTBOOK · READER

Feynman Lectures On Computation

Richard P. Feynman and Anthony Hey

Series: *Frontiers in Physics*

When, in 1984/86, Richard P. Feynman gave his famous course on computation at the California Institute of Technology, he asked Tony Hey to adapt his lecture notes into a book. Although led by Feynman, the course also featured, as occasional guest speakers, some of the most brilliant men in science at that time, including Marvin Minsky, Charles Bennett, and John Hopfield. Although the lectures are now thirteen years old, most of the material is timeless and presents a Feynmanesque overview of many standard and some not-so-standard topics in computer science such as reversible logic gates and quantum computers.

CRC Press

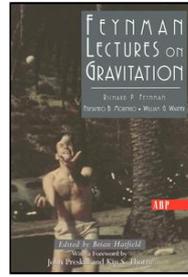
July 2000: 6 x 9: 324pp

Pb: 978-0-738-20296-9: \$62.95

eBook: 978-0-429-50044-2

* For full contents and more information, visit: www.crcpress.com/9780738202969

TEXTBOOK · READER

Feynman Lectures On Gravitation

Richard Feynman, Fernando Morinigo, William Wagner, Brian Hatfield and David Pines

Series: *Frontiers in Physics*

The Feynman Lectures on Gravitation are based on notes prepared during a course on gravitational physics that Richard Feynman taught at Caltech during the 1962-63 academic year. For several years prior to these lectures, Feynman thought long and hard about the fundamental problems in gravitational physics, yet he published very little. These lectures represent a useful record of his viewpoints and some of his insights into gravity and its application to cosmology, superstars, wormholes, and gravitational waves at that particular time. The lectures also

contain a number of fascinating digressions and asides on the foundations of physics and other issues. Characteristically, Feynman took an untraditional non-geometric approach to gravitation and general relativity based on the underlying quantum aspects of gravity. Hence, these lectures contain a unique pedagogical account of the development of Einstein's general theory of relativity as the inevitable result of the demand for a self-consistent

CRC Press

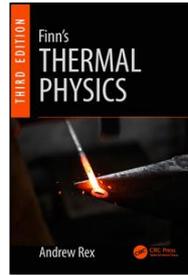
June 2002: 6 x 9: 280pp

Pb: 978-0-813-34038-8: \$57.95

eBook: 978-0-429-50285-9

* For full contents and more information, visit: www.crcpress.com/9780813340388

3rd Edition · TEXTBOOK · READER

Finn's Thermal Physics

Andrew Rex and C.B.P. Finn, Sussex University, UK

This book continues to provide the most readable, concise, and easy-to-follow introduction to thermal physics. While maintaining the style of the original work, this new edition now covers statistical mechanics and incorporates worked examples systematically throughout the text. It also includes more problems and essential updates, such as discussions on superconductivity, magnetism, Bose-Einstein condensation, and climate change. Anyone needing to acquire an intuitive understanding of thermodynamics from first principles will find this third edition indispensable.

CRC Press

Market: Physics

April 2017: 6-1/8 x 9-1/4: 366pp

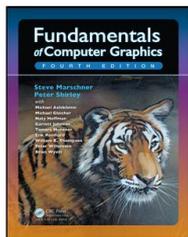
Hb: 978-1-138-70378-0: \$140.00

Pb: 978-1-498-71887-5: \$67.95

eBook: 978-1-498-71890-5

* For full contents and more information, visit: www.crcpress.com/9781498718875

4th Edition · TEXTBOOK · READER

Fundamentals of Computer Graphics

Steve Marschner, Cornell University, Ithaca, New York, USA and Peter Shirley, Purity, LLC

The fourth edition of this textbook continues to provide an outstanding and comprehensive introduction to basic computer graphic technology and theory. Focusing on geometric intuition, it shows how computer graphics are created by using the complementary approaches of ray tracing and rasterization. It retains the informal and intuitive style of previous editions while improving precision, consistency, and completeness of material, allowing aspiring and experienced graphics programmers to better understand and apply foundational principles to the

development of efficient code in creating film, game, or web designs.

A K Peters/CRC Press

Market: Computer Science & Engineering

December 2015: 7-1/2 x 9-1/4: 734pp

Hb: 978-1-482-22939-4: \$123.00

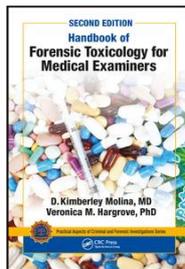
eBook: 978-1-482-22941-7

Prev. Ed Hb: 978-1-568-81469-8

* For full contents and more information, visit: www.crcpress.com/9781482229394



2nd Edition · NEW EDITION

Handbook of Forensic Toxicology for Medical Examiners

D. K. Molina, M.D. and Veronica Hargrove

Series: *Practical Aspects of Criminal and Forensic Investigations*

The Handbook of Forensic Toxicology for Medical Examiners is a concise handbook referencing the most common toxic substances and their reported non-toxic, toxic, and lethal concentrations, making it an ideal text for quick reference in the lab or autopsy room.

CRC Press

Market: Toxicology/Forensic Science

August 2018: 6-1/8 x 9-1/4: 260pp

Hb: 978-0-815-36581-5: \$240.00

Pb: 978-0-815-36544-0: \$94.95

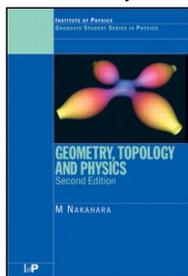
eBook: 978-1-351-26060-2

Prev. Ed Pb: 978-1-420-07641-7

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2nd Edition · TEXTBOOK · READER

Geometry, Topology and Physics

Mikio Nakahara, Kinki University, Osaka, Japan

This book provides an introduction to the ideas and techniques of differential geometry and topology. It starts with a brief survey of quantum field theory, gauge theory, general relativity, vector spaces, and topology. Using many illustrations, exercises, and problems, the author demonstrates more elaborate concepts of topology and geometry, including fiber bundles, characteristic classes, and index theorems. New to this second edition is the proof of the index theorem in terms of supersymmetric quantum mechanics. The final two chapters examine anomalies in gauge field theories and the analysis of Polakov's bosonic string theory from the geometrical point of view.

CRC Press

June 2003: 596pp

Hb: 978-1-138-41336-8: \$195.00

Pb: 978-0-750-30606-5: \$91.95

eBook: 978-1-315-27582-6

Prev. Ed Pb: 978-0-852-74095-8

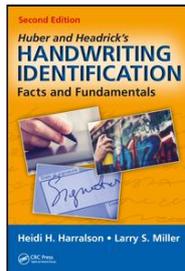
* For full contents and more information, visit: www.crcpress.com/9780750306065



2nd Edition

Huber and Headrick's Handwriting Identification

Facts and Fundamentals, Second Edition



Heidi H. Harralson, East Tennessee State University, USA and Larry S. Miller, East Tennessee State University, USA

This is a complete revision of Huber and Headrick's classic work on handwriting examination. New coverage includes a discussion of: anonymous or disguised handwriting, handwriting analysis training, an updated listing and clarification of terminology and electronic signatures, the analysis of digitized handwriting, and other related technological advances. The book includes completely updated photographs, several added illustrations, and advances in scientific research in the area over the last 20 years.

CRC Press

Market: Forensics & Criminal Justice

December 2017: 7 x 10: 420pp

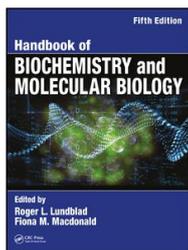
Hb: 978-1-498-75130-8: \$99.95

eBook: 978-1-315-15246-2

Prev. Ed Hb: 978-0-849-31285-4

* For full contents and more information, visit: www.crcpress.com/9781498751308

5th Edition · NEW EDITION

Handbook of Biochemistry and Molecular Biology

Edited by Roger L. Lundblad, Lundblad Biotechnology, Chapel Hill, North Carolina, USA and Fiona Macdonald, CRC Press, Boca Raton, Florida, USA

A comprehensive compendium of basic information on proteins, nucleic acids, lipids and carbohydrates, the revised edition will retain the concise, easy-to-use format of the original edition. The book will include data on amino acids; peptides; proteins; lipids; vitamins; nucleic acids; carbohydrates; physical and chemical data; and proteomics, genomics and cell biology. New sections will be added on DNA modification, novel protein analysis methods, lipidomics and chemical biology.

CRC Press

Market: Chemistry

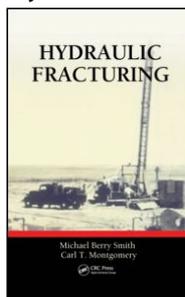
June 2018: 8-1/2 x 11: 1001pp

Hb: 978-1-138-03309-2: \$279.95

eBook: 978-1-315-31444-0

Prev. Ed Hb: 978-0-849-39168-2

* For full contents and more information, visit: www.crcpress.com/9781138033092

Hydraulic Fracturing

Michael Berry Smith, NSI Technologies, LLC, Tulsa, Oklahoma, USA and Carl Montgomery

Series: *Emerging Trends and Technologies in Petroleum Engineering*

This book explains how to properly engineer and optimize a hydraulically fractured well by selecting the right materials, evaluating the economic benefits, and ensuring the safety and success of the people, project, environment, and equipment. From data estimation to design, operation, and performance, the text presents a logical, step-by-step process for hydraulic fracturing that aids in proper engineering decision making when stimulating a particular reservoir. Numerous problem sets reinforce the learning and aid in risk assessment. Additional

material is available from the CRC Press website.

CRC Press

Market: Petroleum Engineering

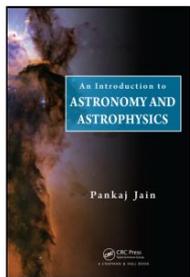
June 2015: 6-1/8 x 9-1/4: 812pp

Hb: 978-1-466-56685-9: \$220.00

eBook: 978-1-466-56692-7

* For full contents and more information, visit: www.crcpress.com/9781466566859

TEXTBOOK · READER

An Introduction to Astronomy and Astrophysics

Pankaj Jain, Indian Institute of Technology, Kanpur
This undergraduate-level textbook addresses key physics concepts relevant to stellar observations, including radiation, electromagnetic spectrum, photometry, continuous and discrete spectrum, and spectral lines. It describes instruments used for astronomical observations as well as how the radiation received is characterized and interpreted. The book also examines the structure of stars, the basic equations which explain stars in equilibrium, and the fusion reactions occurring in stellar cores. Plus, it discusses the evolution of stars, the solar system, the dynamics of galaxies, and the fundamentals of modern cosmology.

CRC Press

Market: Physics

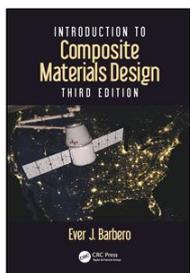
April 2015: 6-1/8 x 9-1/4: 365pp

Hb: 978-1-439-88590-1: **\$93.95**

eBook: 978-1-439-88591-8

* For full contents and more information, visit: www.crcpress.com/9781439885901

3rd Edition · TEXTBOOK

Introduction to Composite Materials Design

Ever J. Barbero, West Virginia University, Morgantown, USA
Series: Composite Materials
This Third Edition includes the latest analysis techniques for the preliminary design of composite materials, including universal carpet plots and temperature dependent properties. The book features a practical, design-oriented presentation aimed at students and practicing engineers learning analysis and design of composite materials and structures. Expanding the coverage of previous editions, the text provides the main tools on design for reliability and an expanded material property database. Readers will find this edition highly streamlined for teaching, with new comprehensive examples and exercises emphasizing design as well as practical content pertinent to current industry needs.

CRC Press

Market: Materials Science

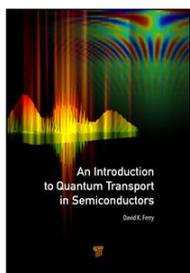
October 2017: 7 x 10: 534pp

Hb: 978-1-138-19680-3: **\$119.95**

eBook: 978-1-315-29649-4

* For full contents and more information, visit: www.crcpress.com/9781138196803

TEXTBOOK · READER

An Introduction to Quantum Transport in Semiconductors

David K. Ferry, Arizona State Univ. Arizona State Univ.
This book moves beyond the basics to highlight the full quantum mechanical nature of the transport of carriers through nanoelectronic structures. The book is unique in that addresses quantum transport only in the materials that are of interest to microelectronics—semiconductors, with their variable densities and effective masses. The book describes all approaches to quantum transport in semiconductors, thus becoming an essential textbook for advanced graduate students in electrical engineering or physics.

Pan Stanford

Market: Electronics

January 2018: 6 x 9: 526pp

Hb: 978-9-814-74586-4: **\$149.95**

eBook: 978-9-814-74587-1

* For full contents and more information, visit: www.crcpress.com/9789814745864

10 Volume Set · TEXTBOOK

An Introduction to Systems Biology

Design Principles of Biological Circuits

**Uri Alon**, Weizmann Institute of Science, Rehovot, Israel*Series: Chapman & Hall/CRC Mathematical and Computational Biology*

This book presents recently discovered design principles that govern the structure and behavior of biological networks such as gene circuits, highlighting simple, recurring circuit elements that make up the network. It provides a quantitative theory for which circuits are found in a given environment and a mathematical framework for understanding and even designing

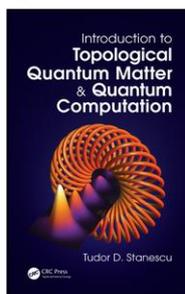
biological circuits. The book requires only basic mathematics and includes a review of the necessary background material. It fills a significant need for a textbook and introduction to the concepts, principles, and mathematical tools that will form the basis of future developments in the field.

Chapman and Hall/CRC

July 2006: 7 x 10: 320pp

Hb: 978-1-138-44202-3: **\$195.00**Pb: 978-1-584-88642-6: **\$71.95**

eBook: 978-1-420-01143-2

* For full contents and more information, visit: www.crcpress.com/9781584886426**Introduction to Topological Quantum Matter & Quantum Computation****Tudor D. Stanescu**, West Virginia University, Morgantown, USA

Introduction to Topological Quantum Matter & Quantum Computation provides an introduction to and a synthesis of a fascinating and rapidly expanding research field emerging at the crossroads of condensed matter physics, mathematics, and computer science. Providing the big picture, this book is ideal for graduate students and researchers entering this field as it allows for the fruitful transfer of paradigms and ideas amongst different areas, and includes many specific examples to help the reader understand abstract and sometimes challenging concepts.

CRC Press

Market: Physics

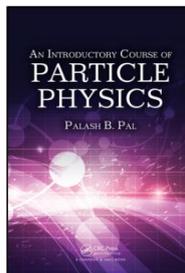
December 2016: 6-1/8 x 9-1/4: 380pp

Hb: 978-1-482-24593-6: **\$93.95**

eBook: 978-1-315-18150-9

* For full contents and more information, visit: www.crcpress.com/9781482245936

TEXTBOOK · READER

An Introductory Course of Particle Physics**Palash B. Pal**, Saha Institute of Nuclear Physics, Calcutta, India

For graduate students unfamiliar with particle physics, this text teaches the basic techniques and fundamental theories related to the subject. It gives them the competence to work out various properties of fundamental particles, such as scattering cross-section and lifetime. The book also gives a lucid summary of the main ideas involved. Figure slides are available upon qualifying course adoption.

CRC Press

Market: Physics

July 2014: 6-1/8 x 9-1/4: 816pp

Hb: 978-1-482-21698-1: **\$91.95**

eBook: 978-1-482-21699-8

* For full contents and more information, visit: www.crcpress.com/9781482216981

3rd Edition - 97 Volume Set

Liquid Chromatography-Mass Spectrometry

Wilfried M.A. Niessen, hyphen MassSpec Consultancy, Leiden, The Netherlands

Series: *Chromatographic Science Series*

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CRC Press

August 2006: 6 x 9: 632pp

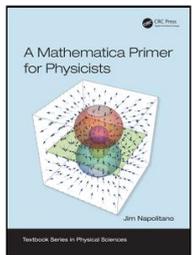
Hb: 978-0-824-74082-5: \$220.00

eBook: 978-1-420-01454-9

Prev. Ed Hb: 978-0-824-71936-4

* For full contents and more information, visit: www.crcpress.com/9780824740825

TEXTBOOK · READER

A Mathematica Primer for Physicists

Jim Napolitano, Temple University, Pennsylvania, USA

Series: *Textbook Series in Physical Sciences*

This book offers the most concise and approachable guide for quickly getting into Mathematica and using it for solving common problems. The author addresses a wide range of problems, including numerical calculations, animation, and visualization tools. Each chapter begins with simple commands, and then shows how to apply them. The goal is to give the essentials necessary for readers to get started, without getting bogged down in unnecessary details. The writing is clear and conversational, making it accessible and easy for the reader to follow.

CRC Press

Market: Physics

March 2018: 6-1/8 x 9-1/4: 200pp

Hb: 978-1-138-48656-0: \$189.95

Pb: 978-1-138-03509-6: \$69.95

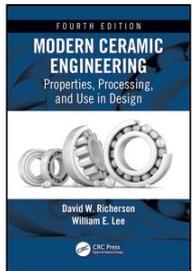
eBook: 978-1-315-26948-1

* For full contents and more information, visit: www.crcpress.com/9781138035096

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Modern Ceramic Engineering

Properties, Processing, and Use in Design, Fourth Edition



David W. Richerson, Retired, University of Utah, and William E. Lee, Imperial College, London, Department of Materials

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CRC Press

Market: Materials Science

May 2018: 7 x 10: 812pp

Hb: 978-1-498-71691-8: \$139.95

eBook: 978-0-429-48824-5

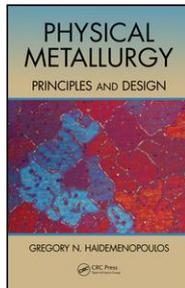
Prev. Ed Hb: 978-1-574-44693-7

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TEXTBOOK · READER

Physical Metallurgy

Principles and Design



Gregory N. Haidemenopoulos

This book focuses on the processing-structure-properties triangle as it applies to metals and alloys. It introduces the fundamental principles of physical metallurgy and the design methodologies for alloys and processing. It discusses the structure and change of structure through phase transformations as well as strengthening mechanisms and mechanical properties as they relate to structure.

CRC Press

Market: Materials Science

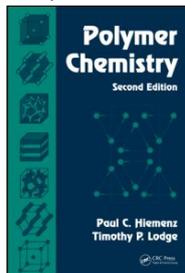
January 2018: 6-1/8 x 9-1/4: 476pp

Hb: 978-1-138-62768-0: \$129.95

eBook: 978-1-315-21122-0

* For full contents and more information, visit: www.crcpress.com/9781138627680

2nd Edition · TEXTBOOK · READER

Polymer Chemistry

Paul C. Hiemenz, Emeritus - Cal State Polytechnic University, Pomona, CA and Timothy P. Lodge, University of Minnesota-Twin Cities, Minneapolis, USA

Written by established professors, this highly recommended new edition focuses in on polymer properties at the molecular level. The authors discuss chemical structures, synthesis, characterization, and properties. This edition integrates theories and experiments made possible by instrumentation advances. It includes new chapters on controlled polymerization and chain conformations and updated material on synthesis, viscoelasticity, solution properties, and thermodynamics. Mathematical tools, fully derived problems, and well organized content can be scaled

to meet the needs of introductory and advanced courses in chemistry, materials science, and chemical engineering. A solutions manual is available with qualifying course adoptions

CRC Press

February 2007: 7 x 10: 608pp

Hb: 978-1-574-44779-8: \$125.00

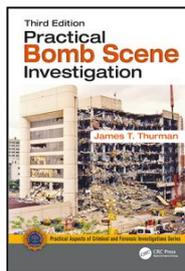
eBook: 978-1-420-01827-1

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* For full contents and more information, visit: www.crcpress.com/9781574447798



3rd Edition

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James T. Thurman, Eastern Kentucky University, Richmond, USA

Series: *Practical Aspects of Criminal and Forensic Investigations*

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CRC Press

Market: Forensics & Criminal Justice

July 2017: 7 x 10: 532pp

Hb: 978-1-498-77308-9: \$109.95

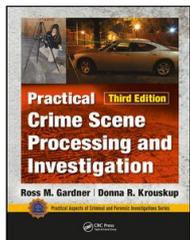
eBook: 978-1-315-22892-1

Prev. Ed Hb: 978-1-439-81959-3

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3rd Edition · TEXTBOOK · READER

Practical Crime Scene Processing and Investigation, Third Edition



Ross M. Gardner, former felony criminal investigator at the U.S. Army Criminal Investigation Command, Georgia, USA and Donna R. Krouskup

Series: Practical Aspects of Criminal and Forensic Investigations
Practical Crime Scene Processing and Investigation, Third Edition is a basic technical reference for those learning or engaged in crime scene investigation. It remains a standard reference due to the "practical" nature of the book. It describes in depth procedures, explaining not just why such activity is required, but a practical how—to approach for accomplishing those activities. These procedures are validated through field trial and

are adjusted to the changing legal and scientific environment that crime scene investigators encounter.

CRC Press

Market: Forensic and Police Science

October 2018: 8 x 10: 405pp

Hb: 978-1-138-04778-5: \$99.95

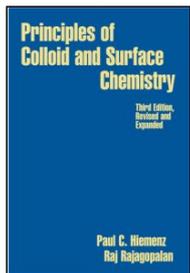
eBook: 978-1-315-17059-6

Prev. Ed Hb: 978-1-439-85302-3

* For full contents and more information, visit: www.crcpress.com/9781138047785

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Principles of Colloid and Surface Chemistry, Revised and Expanded



Edited by Paul C. Hiemenz, Emeritus—Cal State Polytechnic University, Pomona, CA and Raj Rajagopalan, Consultant, Singapore, The Republic of Singapore

This work aims to familiarize students with the fundamentals of colloid and surface science, from various types of colloids and colloidal phenomena, and classical and modern characterization/measurement techniques to applications of colloids and surface science in engineering, technology, chemistry, physics and biological and medical sciences. The Journal of Textile Studies proclaims "High praise from peers . . . contains valuable information on many topics of interest to food rheologists and polymer scientists . . . [The book] should be in the libraries of academic and industrial food research

organizations" and Chromatographia describes the book as ". . . an excellent textbook, excellently organised, clearly written and well laid out."

CRC Press

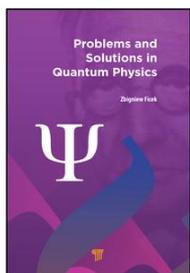
March 1997: 7 x 10: 672pp

Hb: 978-0-824-79397-5: \$105.00

eBook: 978-1-315-27428-7

* For full contents and more information, visit: www.crcpress.com/9780824793975

Problems and Solutions in Quantum Physics



Zbigniew Ficek, The National Centre for Applied Physics, Riyadh, Saudi Arabia

This book contains tutorial problems with solutions for the textbook Quantum Physics for Beginners. The reader studying the abstract field of quantum physics needs to solve plenty of practical, especially quantitative, problems. This book places emphasis on basic problems of quantum physics together with some instructive, simulating, and useful applications. A considerable range of complexity is presented by these problems, and not too many of them can be solved using formulas alone.

Pan Stanford

Market: Physics

April 2016: 6 x 9: 192pp

Hb: 978-9-814-66936-8: \$72.95

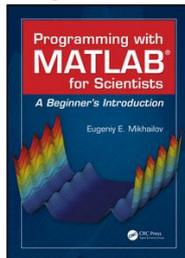
eBook: 978-9-814-66937-5

* For full contents and more information, visit: www.crcpress.com/9789814669368

TEXTBOOK · READER

Programming with MATLAB for Scientists

A Beginner's Introduction



Eugeny E. Mikhailov, College of William and Mary, Department of Physics, Williamsburg, Virginia, USA

This book offers an introduction to the basics of MATLAB programming to scientists and engineers. The author leads with engaging examples to build a working knowledge, specifically geared to those with science and engineering backgrounds. The reader is empowered to model and simulate real systems, as well as present and analyze everyday data sets. In order to achieve those goals, the contents bypass excessive "under the hood" details, and instead gets right down to the essential, practical foundations for successful programming and modeling.

CRC Press

Market: Computer Science/Physics

January 2018: 7 x 10: 252pp

Hb: 978-1-138-57004-7: \$149.95

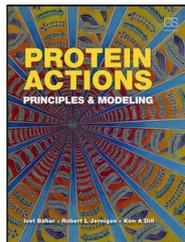
Pb: 978-1-498-73828-6: \$69.95

* For full contents and more information, visit: www.crcpress.com/9781498738286

TEXTBOOK · READER

Protein Actions

Principles and Modeling



Ivet Bahar, Robert L. Jernigan and Ken A. Dill

Protein Actions: Principles and Modeling describes the basic principles of protein molecules—their structures; their folding, binding and aggregation; their dynamics and mechanisms; and their evolution—as well as the methods of modeling them, including bioinformatics, physics-based computer simulations, and the tools of drug discovery. It is intended for a one-semester course for biological scientists learning quantitative foundations and for physical scientists learning the biology and chemistry. This text is ideal for graduates, advanced undergraduates, and any professional who seeks an introduction to the biological, chemical, and physical properties of proteins.

Garland Science

Market: Protein science

February 2017: 8 3/8 x 10 7/8: 322pp

Pb: 978-0-815-34177-2: \$115.00

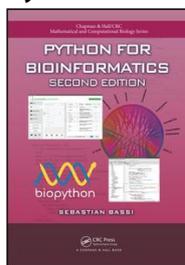
eBook: 978-1-315-21221-0

* For full contents and more information, visit:

www.garlandscience.com/product/isbn/9780815341772

2nd Edition

Python for Bioinformatics



Sebastian Bassi, Globant, San Francisco, USA

Series: Chapman & Hall/CRC Mathematical and Computational Biology

In today's data driven biology, programming knowledge is essential in turning ideas into testable hypothesis. Based on the author's extensive experience, Python for Bioinformatics, Second Edition helps biologists get to grips with the basics of software development. Requiring no prior knowledge of programming-related concepts, the book focuses on the Python computer language. This new edition is updated throughout to Python 3 and is designed not just to help scientists master the basics, but to do more in less time and in a reproducible way.

Chapman and Hall/CRC

Market: Computer Science & Engineering

July 2017: 7 x 10: 424pp

Hb: 978-1-138-09437-6: \$189.95

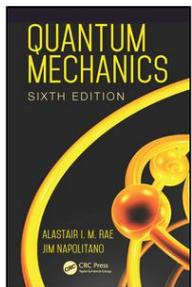
Pb: 978-1-138-03526-3: \$79.95

eBook: 978-1-315-26874-3

Prev. Ed Pb: 978-1-584-88929-8

* For full contents and more information, visit: www.crcpress.com/9781138035263

6th Edition · TEXTBOOK · READER

Quantum Mechanics

Alastair I. M. Rae, Birmingham University, UK and Jim Napolitano, Temple University, Pennsylvania, USA

This sixth edition builds on its highly praised predecessors to make the text even more accessible to a wider audience. It contains three new chapters that review prerequisite physics and mathematics, laying out the notation, formalism, and physical basis necessary for the rest of the book. Along with more problems, this edition also presents short descriptions of numerous applications relevant to the physics discussed, offering a brief look at what quantum mechanics has made possible industrially and scientifically.

CRC Press

Market: Physics

December 2015: 6-1/8 x 9-1/4: 414pp

Hb: 978-1-138-45833-8: \$195.00

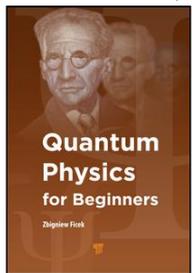
Pb: 978-1-482-29918-2: \$91.95

eBook: 978-1-482-29921-2

Prev. Ed Pb: 978-1-584-88970-0

* For full contents and more information, visit: www.crcpress.com/9781482299182

TEXTBOOK · READER

Quantum Physics for Beginners

Zbigniew Ficek, The National Centre for Applied Physics, Riyadh, Saudi Arabia

The textbook introduces students to the main ideas of quantum physics and the basic mathematical methods and techniques used in the fields of advanced quantum physics, atomic physics, laser physics, nanotechnology, quantum chemistry, and theoretical mathematics. The textbook explains how microscopic objects (particles) behave in unusual ways, giving rise to what's called quantum effects. It contains a wide range of tutorial problems from simple confidence-builders to fairly challenging exercises that provide adequate understanding of the basic concepts of quantum physics.

Pan Stanford

Market: Physics

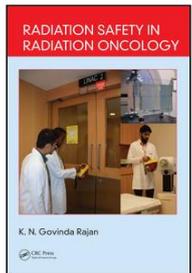
April 2016: 6 x 9: 340pp

Hb: 978-9-814-66938-2: \$105.00

eBook: 978-9-814-66939-9

* For full contents and more information, visit: www.crcpress.com/9789814669382

TEXTBOOK · READER

Radiation Safety in Radiation Oncology

K. N. Govinda Rajan, PSG Hospitals, Coimbatore, Tamil Nadu, India

The proposed book aims to explain the basic principles, concepts and regulations behind radiation protection and their application in the field of radiation oncology practice. This book will be useful to all those students, teachers and practicing professionals involved in the field of radiation oncology namely a) the radiation oncology physicists b) therapy technologists c) radiation oncologists d) oncology nurses and e) regulators undergoing IAEA training in regulations. The main target audience for the book are the medical physics students doing undergraduate or graduate program in radiation oncology physics and the teachers who teach the subject in the academic institutions.

CRC Press

Market: Physics

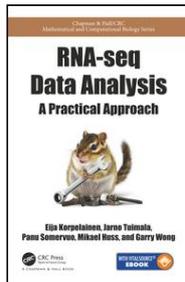
August 2017: 7 x 10: 426pp

Hb: 978-1-498-76224-3: \$129.95

eBook: 978-1-498-76225-0

* For full contents and more information, visit: www.crcpress.com/9781498762243**RNA-seq Data Analysis**

A Practical Approach



Eija Korpelainen, CSC - IT Center for Science, Espoo, Finland, Jarno Tuimala, RS-koulutus, Helsinki, Finland, Panu Somervuo, University of Helsinki, Finland, Mikael Huss, SciLifeLab, Stockholm University, Sweden and Garry Wong, University of Eastern Finland, Kuopio

Series: *Chapman & Hall/CRC Mathematical and Computational Biology*

This self-contained guide enables researchers to examine differential expression at gene, exon, and transcript levels and to discover novel genes, transcripts, and whole transcriptomes. It takes readers through the whole data analysis workflow. Each chapter starts with theoretical background, followed by descriptions of relevant analysis tools and practical examples.

Accessible to both bioinformaticians and nonprogramming wet lab scientists, the examples illustrate the use of command-line tools, R, and other open source tools.

Chapman and Hall/CRC

Market: Computer Science & Engineering

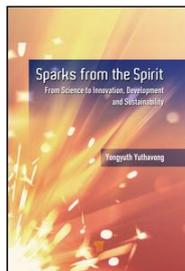
September 2014: 6-1/8 x 9-1/4: 322pp

eBook: 978-1-466-59501-9

Pack - Book and Ebook: 978-1-466-59500-2: \$72.95

* For full contents and more information, visit: www.crcpress.com/9781466595002**Sparks from the Spirit**

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Yongyuth Yuthavong

This book creates an understanding of science and appreciates its role in innovation and sustainable development. Elaborating the role of science in learning, it explores the effects of science on societies, highlighting the opportunities for newly developing societies to overcome obstacles in development. The book is written in an easy-to-understand manner and contains case studies, practical examples, and historical perspectives. It is intended for a general, especially young, readership.

Pan Stanford

Market: Nanomaterials

December 2017: 6 x 9: 286pp

Hb: 978-9-814-77457-4: \$39.95

eBook: 978-1-315-14599-0

* For full contents and more information, visit: www.crcpress.com/9789814774574

2nd Edition · TEXTBOOK · READER

The Standard Model and Beyond

Paul Langacker, Institute for Advanced Study, Princeton, New Jersey, USA

Series: *Series in High Energy Physics, Cosmology and Gravitation*

This new edition of *The Standard Model and Beyond* presents an advanced introduction to the physics and formalism of the standard model and other non-abelian gauge theories. It provides a solid background for understanding supersymmetry, string theory, extra dimensions, dynamical symmetry breaking, and cosmology. In addition to updating all of the experimental and phenomenological results from the first edition, it contains a new chapter on collider physics; expanded discussions of Higgs, neutrino, and dark matter physics; and many new

problems.

CRC Press

Market: Physics

July 2017: 7 x 10: 636pp

Hb: 978-1-498-76321-9: \$99.95

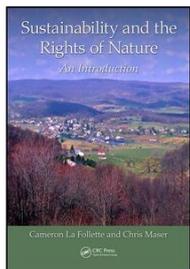
eBook: 978-1-315-17062-6

Prev. Ed Hb: 978-1-420-07906-7

* For full contents and more information, visit: www.crcpress.com/9781498763219

Sustainability and the Rights of Nature

An Introduction



Cameron La Follette, Environmental Advocate, Salem, OR and **Chris Maser**, Consultant, Corvallis, Oregon, USA
Series: Social Environmental Sustainability

Sustainability and the Rights of Nature: An Introduction is a much-needed guide that addresses the exciting and significant paradigm shift to the Rights of Nature, as it is occurring both in the United States and internationally in the fields of environmental law and environmental sustainability. The authors advocate building a relationship of integrity and reciprocity with the planet by placing Rights of Nature in the forefront of our rights-based legal systems.

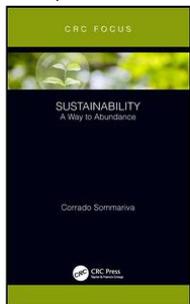
CRC Press

Market: Environmental Science
 May 2017: 7 x 10: 406pp
 Hb: 978-1-498-78844-1: **\$189.95**
 eBook: 978-1-498-78846-5

* For full contents and more information, visit: www.crcpress.com/9781498788441

Sustainability

A Way to Abundance



Corrado Sommariva

The book describes mechanisms by which the planet is driven towards a state of abundance explaining sustainability and abundance principles. It explains related technology intervention and environmental theories and inter-relationships between them. Essential economics of sustainability demonstrating economic feasibility are also dealt with.

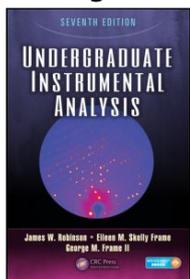
CRC Press

Market: Environmental Sciences
 March 2018: 5-1/2 x 8-1/2: 140pp
 Hb: 978-0-815-36168-8: **\$70.00**
 eBook: 978-1-351-11582-7

* For full contents and more information, visit: www.crcpress.com/9780815361688

7th Edition • TEXTBOOK • READER

Undergraduate Instrumental Analysis



James W. Robinson, Louisiana State University, Baton Rouge, USA, **Eileen Skelly Frame**, Rensselaer Polytechnic Institute, Troy, New York, USA and **George M. Frame II**, New York State Department of Health, Albany, USA

Building on the success of previous editions, this revised and expanded book provides the latest information on the newest techniques, such as cavity ringdown spectroscopy and LIBS. It features details on XRD and its uses in materials analysis as well as additional material on surface analysis. Application chapters focus on the analysis of nanomaterials and chemical and biological warfare agents; in particular, these chapters discuss hyphenated techniques for these materials (like LCMS, GCMS, and LC-ICPMS). The text integrates experiments and problem

sets, including those requiring the use of spreadsheet programs such as Excel.

CRC Press

Market: Analytical Chemistry
 July 2014: 7 x 10: 1264pp
 eBook: 978-1-482-23374-2
 Pack - Book and Online: 978-1-420-06135-2: **\$112.00**
 Prev. Ed Pack - Book and Online: 978-0-824-75359-7

* For full contents and more information, visit: www.crcpress.com/9781420061352



Visualization Analysis and Design



Tamara Munzner, University of British Columbia, Vancouver, Canada

Series: AK Peters Visualization Series

This book provides a systematic, comprehensive framework for thinking about visualization in terms of principles and design choices. It features a unified approach encompassing information visualization techniques for abstract data, scientific visualization techniques for spatial data, and visual analytics techniques for interweaving data transformation and analysis with interactive visual exploration. Suitable for both beginners and more experienced designers, the book does not assume any experience with programming, mathematics, human-computer interaction, or graphic design.

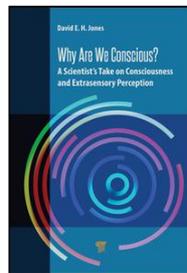
A K Peters/CRC Press

Market: Computer Graphics/Visualization
 December 2014: 7-1/2 x 9-1/4: 428pp
 eBook: 978-1-466-50893-4
 Pack - Book and Ebook: 978-1-466-50891-0: **\$79.95**

* For full contents and more information, visit: www.crcpress.com/9781466508910

Why Are We Conscious?

A Scientist's Take on Consciousness and Extrasensory Perception



David E.H. Jones

This book attempts to see whether the two worlds can be combined. Where the two worlds collide, science is often feeble and unsatisfying. It has nothing to say about the way that everyone is conscious and self-aware, and that many people see ghosts, communicate with spiritual entities, have psychic experiences, believe in a life before birth or after death, and so on. Few human minds are satisfied by a scientific and materialistic view of the world, and many people yearn for something beyond it. As a result, many strange beliefs survive, not in the public scientific world, but in the private mental one. This book rescues some of them by a guessed extension of physical science.

Pan Stanford

Market: Popular Science
 July 2017: 6 x 9: 258pp
 Hb: 978-9-814-77432-1: **\$34.95**
 eBook: 978-1-315-16688-9

* For full contents and more information, visit: www.crcpress.com/9789814774321

2nd Edition • TEXTBOOK • READER

Wildlife Habitat Management

Concepts and Applications in Forestry, Second Edition



Brenda C. McComb, Oregon State University, Corvallis, USA

Balancing species-specific management with biodiversity conservation concerns, this textbook integrates silvicultural and forest planning techniques with principles of habitat ecology and conservation biology. The updated edition includes six new chapters, five added case studies, and new appendices on measuring and interpreting habitat elements and using wildlife habitat relationship models. The chapters cover topics including habitat selection, management, and patterns; forest composition; dynamics of disturbance ecology; riparian and wetland area management; landscape management; assessment and prioritization policies; monitoring techniques; and legal/ethical

issues.

CRC Press

Market: Ecology
 August 2015: 7 x 10: 401pp
 Hb: 978-1-439-87856-9: **\$120.00**
 eBook: 978-1-439-87858-3
 Prev. Ed Hb: 978-0-849-37489-0

* For full contents and more information, visit: www.crcpress.com/9781439878569

X-Ray Diffraction for Materials Research

From Fundamentals to Applications



Myeongkyu Lee, Yonsei University, Korea

This informative new book describes the principles of X-ray diffraction and its applications to materials characterization. It consists of three parts. The first deals with elementary crystallography and optics, which is essential for understanding the theory of X-ray diffraction discussed in the second section of the book. Part 2 describes how the X-ray diffraction can be applied for characterizing such various forms of materials as thin films, single crystals, and powders. The third section of the book covers applications of X-ray diffraction.

Apple Academic Press

Market: Materials Science

February 2016; 6 x 9; 302pp

Hb: 978-1-771-88298-9; \$170.00

eBook: 978-1-771-88299-6

* For full contents and more information, visit: www.crcpress.com/9781771882989

20 Essential Games to Study

Joshua Bycer

The purpose of this book is to look over the past 35 years of games to discuss titles whose design deserves to be studied by anyone with an interest in game design. While there are plenty of books that focus on the technical side of Game Development, there are few that study the nature of game design itself. Featuring a mix of console and PC offerings, I purposely left off some of the easy choices (Mario, Starcraft, Call of Duty, Overwatch) to focus on games that stood out thanks to their designs.

CRC Press

Market: Games & Animation

November 2018: 6 x 9: 104pp

Hb: 978-1-138-34146-3: **\$149.95**

Pb: 978-1-138-34145-6: **\$49.95**

eBook: 978-0-429-44012-0

* For full contents and more information, visit: www.crcpress.com/9781138341456

The Games People Play

Identity, Insights and Issues in the Games Industry

Iain Donald, University of Abertay Dundee, UK

The Games People Play: Identity, Insights and Issues in the Games Industry provides a detailed overview of the game industry's continuing evolution, including the history, economic impact, and patterns of growth. It examines the evolution of games technology, platform cycles, and the establishment of various game genres, before shifting focus toward providing insights into the relationship between the game and the game user. It looks at games alongside social and cultural values and examines the structural relationships between game publishers, distributors, and developers.

A K Peters/CRC Press

Market: Games & Animation

June 2019: 6-1/8 x 9-1/4: 350pp

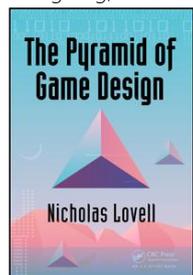
Hb: 978-1-482-20905-1: **\$79.95**

eBook: 978-1-482-20906-8

* For full contents and more information, visit: www.crcpress.com/9781482209051

The Pyramid of Game Design

Designing, Producing and Launching Service Games



Nicholas Lovell

In The Pyramid of Game Design, Nicholas Lovell offers a set of tools that work for all games and will enable you to make better, more profitable games. The heart of the analysis is the session, the building block of your success. Understanding how the on-ramp, playtime, time-to-go and the return hook interact is crucial to building successful long-term games. Building on the session, the pyramid places retention and superfan layers on top of a base layer to create a compelling core. Filled with practical advice, memorable anecdotes and a wealth of game knowledge, the Pyramid of Game Design is a must-read for all game developers.

A K Peters/CRC Press

Market: Games and Animation

November 2018: 6-1/8 x 9-1/4: 310pp

Hb: 978-1-138-29899-6: **\$149.95**

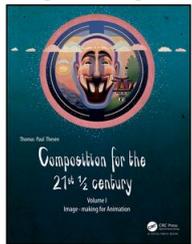
Pb: 978-1-138-29889-7: **\$49.95**

eBook: 978-0-429-44463-0

* For full contents and more information, visit: www.crcpress.com/9781138298897

Composition for the 21st ½ century, Vol 1

Image-making for Animation



Thomas Paul Thesen

This book is about composition and its application in animation, illustration, games and film. It covers all various aspects of design and explains in detail the use of the specific aspect and provides examples of its impact. Focus is on the ability of each aspect to tell a story and how it affects story. Additionally case studies are included that explain the successful use of those aspects in film and animation. The book is geared to students and professionals, however tries to be as simple as possible in the presentation of each aspect, but also complex in its case studies. The book's goal is to see composition as a technical part of image and film

and as an artistic tool.

CRC Press

Market: Games & Animation

February 2019: 494pp

Hb: 978-1-138-74093-8: **\$149.95**

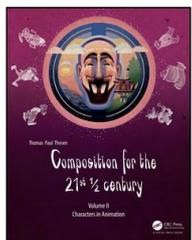
Pb: 978-1-138-74089-1: **\$69.95**

eBook: 978-1-315-18310-7

* For full contents and more information, visit: www.crcpress.com/9781138740891

Composition for the 21st ½ century, Vol 2

Characters in Animation



Thomas Paul Thesen

This book is about composition and its application in animation, illustration, games and film. It covers all various aspects of design and explains in detail the use of the specific aspect and provides examples of its impact. Focus is on the ability of each aspect to tell a story and how it affects story. Additionally case studies are included that explain the successful use of those aspects in film and animation. The book is geared to students and professionals, however tries to be as simple as possible in the presentation of each aspect, but also complex in its case studies. The book's goal is to see composition as a technical part of image and film

and as an artistic tool

CRC Press

Market: Games & Animation

February 2019: 354pp

Hb: 978-1-138-74094-5: **\$149.95**

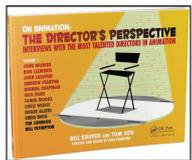
Pb: 978-1-138-74090-7: **\$69.95**

eBook: 978-1-315-18312-1

* For full contents and more information, visit: www.crcpress.com/9781138740907

On Animation

The Director's Perspective Vol 1



Ron Diamond

On Animation: The Director's Perspective is a collection of interviews with 21 animated feature-film directors. These extensive interviews were conducted over the past several years by filmmakers and educators (and peers to the directors interviewed) Tom Sito and Bill Kroger. Interviews cover in-depth discussion of each director's career -- focusing on their creative development, their films, lesson learned and advice. The

interviews were edited and produced by Ron Diamond.

CRC Press

Market: Games & Animation

February 2019: 7 x 10: 372pp

Hb: 978-1-138-06707-3: **\$149.95**

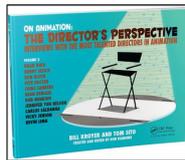
Pb: 978-1-138-06653-3: **\$59.95**

eBook: 978-1-315-15881-5

* For full contents and more information, visit: www.crcpress.com/9781138066533

On Animation

The Director's Perspective Vol 2



Ron Diamond

On Animation: The Director's Perspective is a collection of interviews with 21 animated feature-film directors. These extensive interviews were conducted over the past several years by filmmakers and educators (and peers to the directors interviewed) Tom Sito and Bill Kroger. Interviews cover in-depth discussion of each director's career -- focusing on their creative development, their films, lesson learned and advice. The

interviews were edited and produced by Ron Diamond.

CRC Press

Market: Games & Animation

February 2019: 7 x 10: 326pp

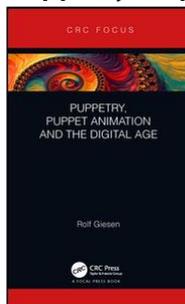
Hb: 978-1-138-06709-7: **\$149.95**

Pb: 978-1-138-06656-4: **\$59.95**

eBook: 978-1-315-15884-6

* For full contents and more information, visit: www.crcpress.com/9781138066564

Puppetry, Puppet Animation and the Digital Age



Rolf Giesen, Visual Effects Society

Series: *Focus Animation*

Rolf Giesen's *Puppetry, Puppet Animation and the Digital Age* explores the unique world of puppetry animation and its application in the digital age. With the advent of digital animation, many individuals see puppetry and 2D animation as being regulated to a niche market. Giesen's text argues against this viewpoint, by demonstrating the pure aesthetic value they have, as well as examples of some of the greatest cinematic uses of puppets. Such samples include, *The Adventures of Prince Achmed*, Ladislav Starevich, O'Brien, Harryhausen and Danforth, Trnka and Švankmajer, Aardman and Laika Studios, *ParaNorman*, and *the Boxtrolls*.

Routledge

Market: Games & Animation

October 2018: 5-1/2 x 8-1/2: 122pp

Hb: 978-0-815-38204-1: **\$70.00**

eBook: 978-1-351-20931-1

* For full contents and more information, visit: www.routledge.com/9780815382041

Visual Storytelling with Color and Light



Michael Humphries, Instructor, Art Center College of Design, Pasadena, CA

In the world today—where digital is considered king—new artists often forego training in traditional mediums, only to find their art suffering down the road. *Visual Storytelling with Color and Light* offers behind-the-scenes secrets of gouache, an opaque watercolor painting technique that naturally leads its practitioners to a deeper understanding of the color theory, composition, and lighting principles they need to succeed in the industry. With insider information on best gouache practices, Photoshop enhancements, and developing a signature style, this new guide has everything you need to take your paintings and backgrounds to the next level.

CRC Press

Market: Animation

April 2019: 10 x 8: 248pp

Hb: 978-0-415-72064-9: **\$49.95**

eBook: 978-1-315-86686-4

* For full contents and more information, visit: www.crcpress.com/9780415720649

Digital Creature Rigging

Wings, Tails & Tentacles for Animation & VFX

Stewart Jones

In a follow-up book, which re-iterates the principles of "Digital Creature Rigging: The Art & Science of CG Creature Setup in 3ds Max", and enhances their relativity with advanced wing, tail and tentacle setups. This book will discuss advanced rigging techniques in 3ds Max, while readers create a fish, octopus and a Game of Thrones style dragon!

CRC Press

Market: Computer Science & Engineering

July 2019: 6 x 9: 248pp

Hb: 978-1-138-56070-3: \$149.95

Pb: 978-1-138-56069-7: \$69.95

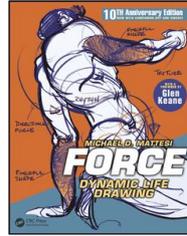
eBook: 978-0-203-71149-1

* For full contents and more information, visit: www.crcpress.com/9781138560697

3rd Edition

FORCE: Dynamic Life Drawing

10th Anniversary Edition



Mike Mattesi, Director of the Entertainment Art Academy based in Southern California.

Series: *Force Drawing Series*

Capture the force in your life drawing subjects with this practical guide to dynamic figure drawing techniques. Packed with superb, powerfully drawn examples, this updated edition of *FORCE* features an all-new section on the "FORCE blob," dozens of fresh illustrations and, for the first time ever, videos, accessible on your phone or device via a free app. Watch, listen, and follow along as the author demonstrates the fundamental *FORCE* line and explains other key concepts of the book in real time.

Whether you are an illustrator, animator, comic book artist, or student, you'll learn to bring out the life in any subject as Mike Mattesi's infectious enthusiasm has you reaching for your pencils!

CRC Press

Market: Animation

March 2017: 8-1/2 x 11: 211pp

Hb: 978-1-138-73517-0: \$110.00

Pb: 978-1-138-91957-0: \$51.95

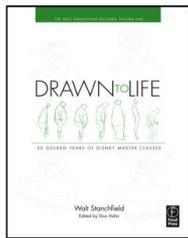
eBook: 978-1-315-68779-7

Prev. Ed Pb: 978-0-240-80845-1

* For full contents and more information, visit: www.crcpress.com/9781138919570

Drawn to Life: 20 Golden Years of Disney Master Classes

Volume 1: The Walt Stanchfield Lectures



Walt Stanchfield, Formerly of the Walt Disney Studios and Don Hahn, Executive Producer of the Disney nature films; CEO, Stone Circle Pictures

Discover the lessons that helped bring about a new golden age of Disney animation!

Routledge

March 2009: 404pp

Pb: 978-0-240-81096-6: \$34.95

eBook: 978-0-080-92823-4

* For full contents and more information, visit: www.routledge.com/9780240810966

Game Magic

A Designer's Guide to Magic Systems in Theory and Practice



Jeff Howard, Dakota State University, Madison, USA

This book explains how to construct magic systems and presents a compendium of arcane lore. Showing you how to weave compelling magic into your games, the book is interspersed with examples that illustrate how to design and program magic systems. It explains how to set up tables of correspondences and spell components as well as how to write programming code integrating these components as part of game mechanics. It also shows how to divide a simulated world into domains of influence and how to use specific rule systems to simulate powers within these realms.

A K Peters/CRC Press

Market: Computer Game Development

April 2014: 6-1/8 x 9-1/4: 376pp

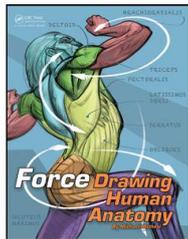
Hb: 978-1-138-42775-4: \$195.00

Pb: 978-1-466-56785-6: \$62.95

eBook: 978-1-466-56787-0

* For full contents and more information, visit: www.crcpress.com/9781466567856

FORCE: Drawing Human Anatomy



Mike Mattesi, Director of the Entertainment Art Academy based in Southern California.

Series: *Force Drawing Series*

Capture the FORCE in your characters with this new guide to anatomy for figure drawing and animation. *FORCE: Drawing Human Anatomy* illustrates the function of human anatomy, rather than just addressing muscles, joints, and their locations. Detailed visual instruction and colorful, step-by-step diagrams allow you to easily follow the construction of an anatomically correct figure as you learn how to use straight and curved lines to show the direction and role of FORCE in the human body.

Special consideration is given to animation for anatomy, allowing you to create a character that is anatomically accurate in both stillness and motion.

CRC Press

Market: Animation

December 2016: 7-1/2 x 10: 313pp

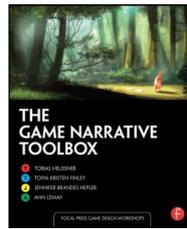
Hb: 978-1-138-73123-3: \$130.00

Pb: 978-0-415-73397-7: \$51.95

eBook: 978-1-315-29553-4

* For full contents and more information, visit: www.crcpress.com/9780415733977

The Game Narrative Toolbox



Tobias Heussner, Game Content/Narrative Designer, Toiya Kristen Finley, Experienced writer and editor., Jennifer Brandes Hepler, Lead writer, and Ann Lemay, Game designer, narrative designer, and writer.

Series: *Focal Press Game Design Workshops*

Four experienced narrative designers from different genres of game development have banded together to create this all-inclusive guide on what it's like to work as a writer and narrative designer in the videogame industry. From concept to final testing, *The Game Narrative Toolbox* walks readers through what role a narrative designer plays on a development team and what the requirements are at every stage of development. Accompanying every chapter are exercises that allow the reader to develop their own documentation, outlines, and game-dialogue samples for use in applying for industry jobs or developing independent projects.

Routledge

Market: Gaming

June 2015: 7-1/2 x 9-1/4: 250pp

Hb: 978-1-138-42824-9: \$195.00

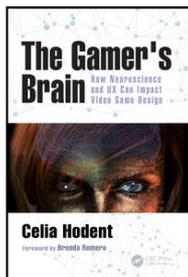
Pb: 978-1-138-78708-7: \$51.95

eBook: 978-1-315-76683-6

* For full contents and more information, visit: www.routledge.com/9781138787087

The Gamer's Brain

How Neuroscience and UX Can Impact Video Game Design



Celia Hodent, Epic Games, Cary, North Carolina, USA

User experience in the gaming industry is a hot topic, as is psychology and neuroscience. Most believe that the brain is rational and makes decisions based on logic and analysis. However, numerous studies show that the brain is instead emotional, and that our decisions are heavily influenced by many biases. As a developer, this raises difficulties that must be taken into account for players to have great experiences. In this book readers will learn how to use neuroscience and user experience guidelines to constantly be aware of these biases so they can make the best design decisions and ship higher-quality games more quickly.

CRC Press

Market: Games and Animation

August 2017: 6-1/8 x 9-1/4: 250pp

Hb: 978-1-138-08996-9: **\$149.95**

Pb: 978-1-498-77550-2: **\$49.95**

eBook: 978-1-315-15472-5

* For full contents and more information, visit: www.crcpress.com/9781498775502

TEXTBOOK · READER

Level Design

Concept, Theory, and Practice



Rudolf Kremers, Omni-Labs

This book is the first to use a conceptual and theoretical foundation to build such a set of practical tools and techniques. It is tied to no particular technology or genre, so it will be a useful reference for many years to come. Kremers covers many concepts universal to level design, such as interactivity, world building, immersion, sensory perception, pace, and more, and he shows how to apply these concepts in practical ways, with many examples from real games.

A K Peters/CRC Press

October 2009: 9.25 x 7.5: 408pp

Hb: 978-1-138-42795-2: **\$195.00**

Pb: 978-1-568-81338-7: **\$70.95**

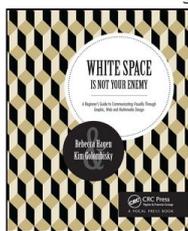
eBook: 978-1-439-87695-4

* For full contents and more information, visit: www.crcpress.com/9781568813387

3rd Edition

White Space Is Not Your Enemy

A Beginner's Guide to Communicating Visually Through Graphic, Web & Multimedia Design



Kim Golombisky, School of Mass Communications, University of South Florida, USA and **Rebecca Hagen**, School of Mass Communications, University of South Florida; President and principle designer at Sky Lake Studio

White Space Is Not Your Enemy is a practical graphic design and layout guide that introduces concepts and practices necessary for producing effective visual communication across a variety of formats—from web to print. Sections on Gestalt theory, color theory, and WET layout are expanded to offer more in-depth content on those topics. This new edition features new covering

current trends in web design—mobile-first, UI/UX design, and web typography—and how they affect a designer's approach to a project. The entire book receives an update using new examples and images that show a more diverse set of graphics that go beyond print and web and focus on tablet, mobile and advertising designs.

A K Peters/CRC Press

Market: web design

October 2016: 7-1/2 x 9-1/4: 292pp

Pb: 978-1-138-80464-7: **\$41.95**

eBook: 978-1-315-75282-2

Prev. Ed Pb: 978-0-240-82414-7

* For full contents and more information, visit: www.crcpress.com/9781138804647



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