

Health & Science

New Books Preview

May 2024



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N.B. Please note prices and publication dates may be subject to change without prior notice. Late Addition titles are ones that missed the corresponding New Books Preview Month.

Support for ebook access issues

We are having some short-term difficulties with access to our new Elsevier eBooks+ platform (previously Student Consult and Expert Consult on Inkling) and to the online ancillaries accompanying Elsevier titles.

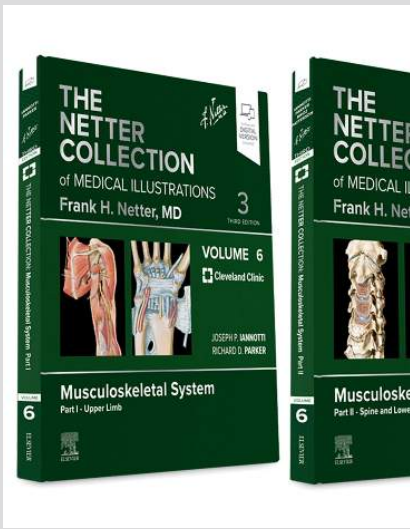
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eBooks+

The Netter Collection of Medical Illustrations: Musculoskeletal System Package, 3e

Volume 6

Edited by : **Joseph Iannotti**; **Richard Parker**, MD, President, Cleveland Clinic Hillcrest and Eastern Region, Professor; **Tom Mroz**, MD, Chair, Orthopaedic and Rheumatology Institute, Cleveland Clinic Main Campus; **Brendan Patterson**, MD, Chair, Orthopaedic Department, Cleveland Clinic Main Campus and **Abby Abelson**, MD, Chair of Rheumatologic and Immunologic Disease Department, Cleveland Clinic Main Campus



ISBN: 9780323881876

PREVIOUS ISBN: 9781416063780

PUB DATE: May 13, 2024

LIST PRICE: £167.99 / \$259.99 /

€195.99

DISCOUNT: Reference

FORMAT: Hardback

TRIM: 9.5w x 11.5h

PAGES: c. 0

AUDIENCE: Diverse worldwide market; both practitioners and trainees across medical and health professions; institutions For the series: medical schools with a systems-based curriculum (students, instructors, staff, library); clinical practitioners at all levels (especially nonspecialists and specialists interested in areas outside of their specialty); Netter fans and gift-buyers for Netter fans. For the book/volume: offices/depts/individuals in orthopaedics, physical therapy, rheumatology, and other musculoskeletal specialties. Much of the content will be superficial for their daily practice purposes, but it will be appreciated for its artistic depictions of the field and something to be used with patients, staff, and students/trainees.

BIC CODES: MFC

THEMA CLASSIFICATION:

THEMAMFC



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An exquisite visual overview of every body system, as only Netter can provide

A Volume in the *Netter Green Book Collection* Series

KEY FEATURES

- Provides a **highly visual guide to the entire musculoskeletal system in three convenient parts**, each covering basic science and anatomy to orthopaedics and rheumatology.
- Provides a **concise overview of complex information** by seamlessly integrating anatomical and physiological concepts using practical clinical scenarios.
- Shares the **experience and knowledge** of Drs. Joseph P. Iannotti, Richard D. Parker, and esteemed colleagues from the Cleveland Clinic, who clarify and expand on the illustrated concepts.
- Compiles **Dr. Frank H. Netter's master medical artistry**—an aesthetic tribute and source of inspiration for medical professionals for over half a century—along with new art in the Netter tradition for each of the major body systems, making this volume a powerful and memorable tool for building foundational knowledge and educating patients or staff.
- **NEW! An eBook version is included with purchase.** The eBook allows you to access all of the text, figures, and references, with the ability to search, make notes and highlights, and have content read aloud.

DESCRIPTION

Offering a **concise, highly visual approach** to the basic science and clinical pathology of the musculoskeletal system, these three updated books in *The Netter Collection of Medical Illustrations* (the CIBA "Green Books") contain unparalleled didactic illustrations reflecting the latest medical knowledge. Revised by Drs. Joseph Iannotti, Richard Parker, and other experts from the Cleveland Clinic, *The Upper Limb (Part 1)*, *Spine and Lower Limb (Part 2)*, and *Biology and Systemic Diseases (Part 3)* of *Musculoskeletal System, Volume 6*, **integrate core concepts of anatomy, physiology, and other basic sciences with common clinical correlates** across health, medical, and surgical disciplines. **Classic Netter art, updated and new illustrations, and modern imaging** continue to bring medical concepts to life and make this timeless work an essential resource for students, clinicians, and educators.

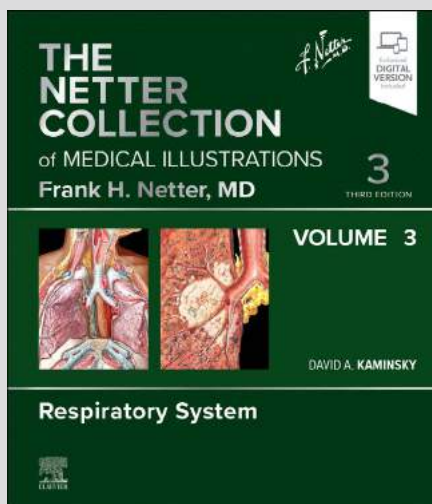
Medical Education Anatomy

<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



eBooks+



The Netter Collection of Medical Illustrations: Respiratory System, Volume 3, 3e

Edited by : **David A. Kaminsky**, MD, Professor of Medicine, Division of Pulmonary and Critical Care, University of Vermont Larner College of Medicine, Burlington, VT, USA

ISBN: 9780323881272
PREVIOUS ISBN: 9781437705744
PUB DATE: May 03, 2024
LIST PRICE: £63.99 / \$99.99 / €74.99
DISCOUNT: Reference
FORMAT: Hardback
TRIM: 8.50w x 10.875h
PAGES: c. 350
ILLUSTRATIONS: 315 illustrations (315 in full color)
AUDIENCE: Diverse worldwide market; both practitioners and trainees across medical and health professions; institutions For the series: medical schools with a systems-based curriculum (students, instructors, staff, library); clinical practitioners at all levels (especially nonspecialists and specialists interested in areas outside of their specialty); Netter fans and gift-buyers for Netter fans. For the book/volume: offices/depts/individuals in pulmonology, respiratory medicine, critical care, sleep medicine
BIC CODES: MFC
THEMA CLASSIFICATION: THEMAMFC; THEMAMZH

An exquisite visual overview of every body system, as only Netter can provide

A Volume in the *Netter Green Book Collection Series*

KEY FEATURES

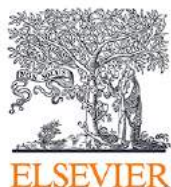
- Provides a **complete overview of the respiratory system** through multidisciplinary coverage from physiology and biochemistry to adult and pediatric medicine and surgery.
- Allows you to access **rare illustrations in one convenient source** from the only Netter work devoted specifically to the respiratory system.
- Covers **timely topics** like COVID-19 and secondary infection/diseases of the respiratory system, RSV, pneumonia, pulmonary hypertension, COPD, asthma, environmental lung disease, sleep disorders, infections of the immunocompromised, neonatal breathing disorders, and drug-resistant tuberculosis.
- Provides a **concise overview of complex information** by seamlessly integrating anatomical and physiological concepts using practical clinical scenarios.
- Shares the **expertise and knowledge of editor** Dr. David A. Kaminsky, who contributes significant experience in asthma and general pulmonary and critical care medicine, and a team of world-class contributors.
- Compiles **Dr. Frank H. Netter's master medical artistry**—an aesthetic tribute and source of inspiration for medical professionals for over half a century—along with new art in the Netter tradition for each of the major body systems, making this volume a powerful and memorable tool for building foundational knowledge and educating patients or staff.
- **NEW! An eBook version is included with purchase.** The eBook allows you to access all of the text, figures, and references, with the ability to search, make notes and highlights, and have content read aloud.

DESCRIPTION

Offering a **concise, highly visual approach** to the basic science and clinical pathology of the respiratory system, this updated volume in *The Netter Collection of Medical Illustrations* (the CIBA "Green Books") contains unparalleled didactic illustrations reflecting the latest medical knowledge. Revised by Dr. David A. Kaminsky, *Respiratory System, Volume 3 integrates core concepts of anatomy, physiology, and other basic sciences with common clinical correlates across health, medical, and surgical disciplines. **Classic Netter art, updated and new illustrations, and modern imaging** continue to bring medical concepts to life and make this timeless work an essential resource for students, clinicians, and educators.*



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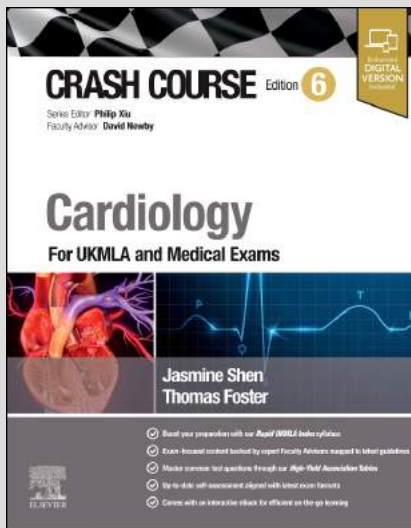
Medical Education Anatomy

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Crash Course Cardiology, 6e

For UKMLA and Medical Exams

Jasmine Shen, MBChB, Junior Doctor, Edinburgh, UK; **Thomas Foster**, MBChB, BMedSci (Hons), Junior Doctor, Edinburgh, UK; **David E Newby**, BA, BSc (Hons), PhD, BM, DM, DSc, MRCP, FRSE, FMedSci, FESC, FACC, British Heart Foundation John Wheatley Chair of Cardiology, University of Edinburgh, UK and **Philip Xiu**, MA (Cantab) MB BChir MRCP MRCGP MScClinEd FHEA MAcadMed RCPATHME, GP Registrar, Yorkshire Deanery, Leeds, UK.

ISBN: 9780443115349

PREVIOUS ISBN: 9780702073571

PUB DATE: May 16, 2024

LIST PRICE: £32.99 / \$40.99 / €38.99

DISCOUNT: Textbook

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 14

BIC CODES: MJD

THEMA CLASSIFICATION:

THEMAMJD

A Volume in the *CRASH COURSE* Series

KEY FEATURES

- Fully aligned to UKMLA requirements, with key 'conditions' and 'presentations' highlighted in handy checklists - save valuable revision time and be confident you have the syllabus covered
- Written by senior students and recent graduates - those closest to what is essential for exam success
- Quality assured by leading Faculty Advisors - ensures complete accuracy of information
- Features the ever popular 'Hints and Tips' boxes and other useful aide-mémoires - distilled wisdom from those in the know
- Updated self-assessment section matching the latest exam formats – confirm your understanding and improve exam technique fast

DESCRIPTION

Crash Course – your effective every-day study companion PLUS the perfect antidote for exam stress! Save time and be assured you have the essential information you need in one place to excel on your course and achieve exam success.

A winning formula now for over 25 years, having sold over 1 million copies and translated in over 8 languages, each series volume has been fine-tuned and fully updated with a full-colour layout tailored to make your life easier. Especially written by senior students or junior doctors – those who understand what is essential for exam success – with all information thoroughly checked and quality assured by expert *Faculty Advisors*, the result is books that exactly meet your needs and you know you can trust.

Each chapter guides you succinctly through the full range of curriculum topics in the UKMLA syllabus, integrating clinical considerations with the relevant basic science and avoiding unnecessary or confusing detail. A range of text boxes help you get to the hints, tips and key points you need fast! A fully revised self-assessment section matching the latest exam formats is included to check your understanding and aid exam preparation. The accompanying enhanced, downloadable eBook completes this invaluable learning package.



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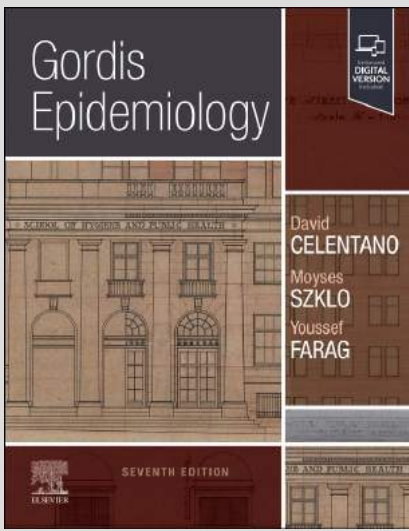
Medical Education UKNL Clinical
Students

<https://virtuale.elsevier.com>, www.elsevier.com

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eBooks+



Gordis Epidemiology, 7e

David D Celentano, ScD, MHS, Charles Armstrong Chair and Professor, Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland; **Moyses Szklo**, MD, Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland and **Youssef Farag**, Faculty Director, Postgraduate Medical Education, Harvard Medical School Associate Faculty, Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health

ISBN: 9780323877756
PREVIOUS ISBN: 9780323552295
PUB DATE: Feb 21, 2024
LIST PRICE: £43.99 / \$54.99 / €48.99
DISCOUNT: Textbook
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 436
AUDIENCE: Students of Public Health (undergrad and grad MPH, MHS), Medicine, and any programs with an introductory Epidemiology course (Environmental Health Sciences; Health and Policy Management; Maternal and Child Health; Community Health Education; Nutrition; Global Health; Epidemiology; Health Science; Infectious Diseases & Travel Medicine; Health Informatics)
BIC CODES: MBNS
THEMA CLASSIFICATION: THEMAMBNS

The #1 textbook in this complex area of today's health care

KEY FEATURES

- Covers the basic principles and concepts of epidemiology in a **clear, uniquely memorable** way, using a wealth of full-color figures, graphs, charts, and cartoons to help you understand and retain key information.
- Includes **new examples and cases reflecting modern epidemiology**, including lessons from the COVID-19 pandemic and other current topics of interest.
- Reflects **how epidemiology is practiced today**, with chapters progressing from observation and developing hypotheses to data collection and analyses.
- Features **end-of-chapter questions** for quick self-assessment, and a glossary of genetic terminology.
- Provides **more than 200 additional multiple-choice self-assessment questions** online.
- Provides a strong basis for understanding the **role and importance of epidemiology** in today's data-driven society.
- **An eBook version is included with purchase.** The eBook allows you to access all of the text, figures, and references, with the ability to search, customize your content, make notes and highlights, and have content read aloud.

Evolve Instructor site with an **image/table collection, test bank, and more** is available to instructors through their Elsevier sales rep or via request at <https://evolve.elsevier.com>.

DESCRIPTION

Continuing in the tradition of award-winning educator and epidemiologist Dr. Leon Gordis, *Gordis Epidemiology, 7th Edition*, provides a **solid introduction to basic epidemiologic principles** as well as **practical applications in public health and clinical practice**, highlighted by real-world examples throughout. Written by Drs. David D Celentano, Moyses Szklo, and Youssef Farag of Johns Hopkins University, this bestselling text is known for its **reader-friendly, accessible writing style** and practical approach to a complex and challenging subject, making it a favorite text of students as well as an ideal resource for health care providers, health policy makers, and epidemiologists at all levels of training and practice.



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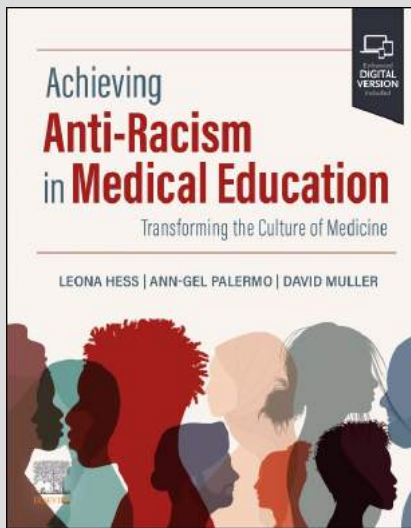


Medical Education Epidemiology
<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



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Achieving Anti-Racism in Medical Education

Transforming the Culture of Medicine

Leona Hess, PhD, Senior Director of Strategy and Equity Education Programs, Icahn School of Medicine at Mount Sinai, New York, New York.; **Ann-Gel Palermo**, DrPH, MPH, Associate Professor, Departments of Medical Education and Pediatrics, Icahn School of Medicine at Mount Sinai, New York, New York. and **David Muller**, MD, Dean for Medical Education, Chair, Department of Medical Education, Professor of Medical Education and Medicine, Icahn School of Medicine at Mount Sinai, New York, New York

ISBN: 9780443112911

PUB DATE: May 15, 2024

LIST PRICE: £38.99 / \$49.99 / €43.99

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 200

AUDIENCE: Individuals and entities focused on medical education (allopathic and osteopathic) – faculty, staff, students, administrators/leaders

BIC CODES: MQC, MB

THEMA CLASSIFICATION:

THEMAMQC

A dynamic, iterative, and lifelong road map for building the capacity to dismantle racism in medical education

KEY FEATURES

- Offers a **ground-breaking, five-phase approach** to dismantling racism in medical education with a strategy that is broadly transformative, lifelong, people-dependent, and responsive to the world around us.
- Offers **activity-led guidance for medical education**—from readiness and engagement through implementation, change management, and sustainability.
- Provides **practical tools and guidance** to establish a self-sustaining cycle, including downloadable forms and worksheets.
- Written by authors who have established a **thriving anti-racism program** at Icahn School of Medicine at Mount Sinai and eleven additional schools who have participated in their framework.
- Includes **student perspectives**.
- An outstanding resource for faculty, staff, students, administrators, and leaders in medical education, as well as those in other areas of health care who provide education and training.
- **An eBook version is included with purchase.** The eBook allows you to access all of the text, figures and references, with the ability to search, make notes and highlights, and have content read aloud.

DESCRIPTION

Systemic racism affects every sector of the medical education work and learning environment, from the staff and faculty who are the backbone of every medical school, to **what and how medical students are taught, who teaches them, and how they are supported and evaluated.** *Achieving Anti-Racism in Medical Education* addresses the underlying root causes of racism in medicine and medical education—the profession’s culture, values, and mental models—and offers **practical, real-world strategies** for transforming its white dominant culture instead of merely reacting to crises and solving discrete problems.



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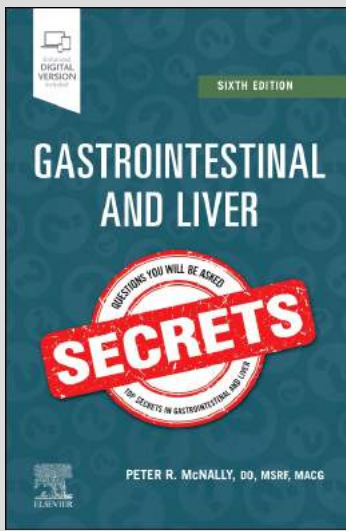


Medical Education Medical Textbook
<https://virtuale.elsevier.com>, www.elsevier.com

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Gastrointestinal and Liver Secrets, 6e

Peter R. McNally, DO, MSRF, FACG, Chief, GI/Hepatology, Evans Army Hospital, Colorado Springs, Colorado, American Board of Internal Medicine Certification in Internal Medicine
American Board of Gastroenterology Certification in Gastroenterology

ISBN: 9780323936378
PREVIOUS ISBN: 9780323260336
PUB DATE: May 31, 2024
LIST PRICE: £51.99 / \$63.99 / €60.99
DISCOUNT: Textbook
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 668
ILLUSTRATIONS: Approx. 425 illustrations
AUDIENCE: Medical students; GI/Hepatology; residents; fellows
BIC CODES: MJJ
THEMA CLASSIFICATION: THEMAMJJ

Get the answers you need for successful patient care

A Volume in the *Secrets Series*

KEY FEATURES

- The proven Secrets Series® format gives you the most return for your time – succinct, easy to read, engaging, and highly effective.
- Fully revised and updated throughout, making it an excellent resource for understanding the physiology and therapy of hepatic and digestive disease.
- New chapters on Microbiome and Surgery for Inflammatory Bowel Disease.
- Top 100 Secrets provide a fast overview of the secrets you must know for success in practice and on exams.
- More than 250 full-color illustrations, endoscopic images, micrographs, and algorithms, plus videos and clinical vignettes online.
- Bulleted lists, mnemonics, practical tips from global leaders in the field – all providing a concise overview of important board-relevant content.
- Portable size makes it easy to carry with you for quick reference or review anywhere, anytime.
- An eBook version is included with purchase. The eBook allows you to access all of the text, figures, and references, with the ability to search, customize your content, make notes and highlights, and have content read aloud.

DESCRIPTION

For more than 30 years, the highly regarded Secrets Series® has provided students and practitioners in all areas of health care with concise, focused, and engaging resources for quick reference and exam review. Gastrointestinal and Liver Secrets, 6th Edition (formerly known as GI/Liver Secrets), offers practical, up-to-date coverage of the full range of essential topics in this dynamic field. This highly regarded resource features the Secrets' popular question-and-answer format that also includes lists, tables, pearls, memory aids, and an easy-to-read style – making inquiry, reference, and review quick, easy, and enjoyable.



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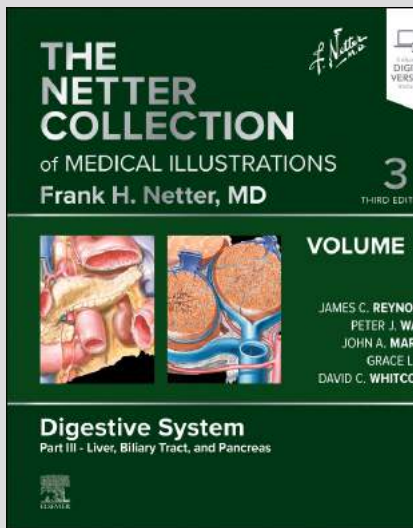


Medical Education Clinical Student
<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



eBooks+



The Netter Collection of Medical Illustrations: Digestive System, Volume 9, Part III – Liver, Biliary Tract, and Pancreas, 3e

Edited by : **James C. Reynolds**, MD, Professor of Clinical Medicine, Co-Director, Neurogastroenterology and Motility Program, Perelman Center for Advanced Medicine, University of Pennsylvania; **Peter J. Ward**, PhD, Professor of Anatomy, West Virginia School of Osteopathic Medicine; **John A. Martin**, MD, Assoc Prof Gastroenterology and Hepatology, Mayo Clinic, Rochester, Minnesota; **Grace L. Su**, MD, Prof of Med and Surg, University of Michigan Medical School, Ann Arbor, Michigan and **David C. Whitcomb**, MD, PhD, Prof of Med, Cell Biology, Physiol and Human Genetics, University of Pittsburgh, Pittsburgh, Pennsylvania

ISBN: 9780323880909
PREVIOUS ISBN: 9781455773923
PUB DATE: May 03, 2024
LIST PRICE: £63.99 / \$99.99 / €74.99
DISCOUNT: Reference
FORMAT: Hardback
TRIM: 8.50w x 10.875h
PAGES: c. 180
ILLUSTRATIONS: 140 illustrations (140 in full color)
AUDIENCE: Diverse worldwide market; both practitioners and trainees across medical and health professions; institutions For the series: medical schools with a systems-based curriculum (students, instructors, staff, library); clinical practitioners at all levels (especially nonspecialists and specialists interested in areas outside of their specialty); Netter fans and gift-buyers for Netter fans. For the book/volume: offices/depts/individuals in GI/Gastroenterology/Hepatology. Much of the content will be superficial for their daily practice purposes, but it will be appreciated for its artistic depictions of the field and something to be used with patients, staff, and students/trainees.
BIC CODES: MJ
THEMA CLASSIFICATION: THEMAMJ



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An exquisite visual overview of every body system, as only Netter can provide

A Volume in the *Netter Green Book Collection Series*

KEY FEATURES

- Provides a **highly visual guide** to the pancreas, liver, and biliary tract in a single source, from basic sciences and normal anatomy and function through pathologic conditions.
- Offers **expert coverage of key topics**, as well as new topics such as other viruses that cause hepatitis.
- Provides a **concise overview of complex information** by integrating anatomical and physiological concepts with clinical scenarios.
- Compiles **Dr. Frank H. Netter's master medical artistry**—an aesthetic tribute and source of inspiration for medical professionals for over half a century—along with new art in the Netter tradition for each of the major body systems, making this volume a powerful and memorable tool for building foundational knowledge and educating patients or staff.
- **NEW! An eBook version is included with purchase.** The eBook allows you to access all of the text, figures, and references, with the ability to search, make notes and highlights, and have content read aloud.

DESCRIPTION

Offering a **concise, highly visual approach** to the basic science and clinical pathology of the digestive system, this updated volume in *The Netter Collection of Medical Illustrations* (the CIBA "Green Books") contains unparalleled didactic illustrations reflecting the latest medical knowledge. Revised by Drs. James C. Reynolds, Peter J. Ward, John A. Martin, Grace L. Su, and David C. Whitcomb, *Liver, Biliary Tract, and Pancreas*, Part 3 of the *Digestive System, Volume 9*, **integrates core concepts of anatomy, physiology, and other basic sciences with common clinical correlates** across health, medical, and surgical disciplines. **Classic Netter art, updated and new illustrations, and modern imaging** continue to bring medical concepts to life and make this timeless work an essential resource for students, clinicians, and educators.

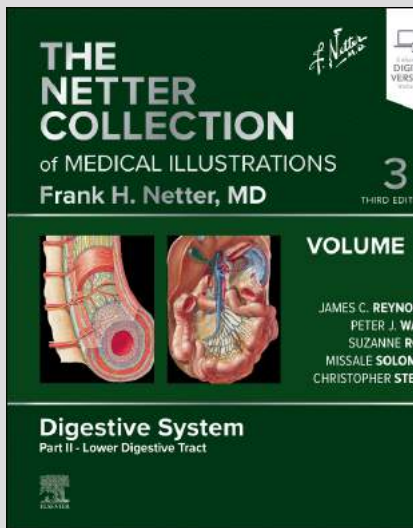
Medical Education Anatomy

<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



eBooks+



The Netter Collection of Medical Illustrations: Digestive System, Volume 9, Part II – Lower Digestive Tract, 3e

Edited by : **James C. Reynolds**, MD, Professor of Clinical Medicine, Co-Director, Neurogastroenterology and Motility Program, Perelman Center for Advanced Medicine, University of Pennsylvania; **Peter J. Ward**, PhD, Professor of Anatomy, West Virginia School of Osteopathic Medicine; **Suzanne Rose**, MD, MEd, Sr. Vice Dean for Medical Education; Perelman School of Medicine, UPenn;; **Missale Solomon**, MD, Digestive Diseases Assoc and Catonsville

ISBN: 9780323881319
PREVIOUS ISBN: 9781455773916
PUB DATE: May 03, 2024
LIST PRICE: £63.99 / \$99.99 / €74.99
DISCOUNT: Reference
FORMAT: Hardback
TRIM: 8.50w x 10.875h
PAGES: c. 242
ILLUSTRATIONS: 200 illustrations (200 in full color)
AUDIENCE: Diverse worldwide market; both practitioners and trainees across medical and health professions; institutions For the series: medical schools with a systems-based curriculum (students, instructors, staff, library); clinical practitioners at all levels (especially nonspecialists and specialists interested in areas outside of their specialty); Netter fans and gift-buyers for Netter fans. For the book/volume: offices/depts/individuals in GI/Gastroenterology. Much of the content will be superficial for their daily practice purposes, but it will be appreciated for its artistic depictions of the field and something to be used with patients, staff, and students/trainees.
BIC CODES: MJ
THEMA CLASSIFICATION: THEMAMJ



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An exquisite visual overview of every body system, as only Netter can provide

A Volume in the *Netter Green Book Collection Series*

KEY FEATURES

- Provides a **highly visual guide** to the small bowel and colon in a single source, from basic sciences and normal anatomy and function through pathologic conditions.
- Offers **expert coverage of new topics**, including gut microbiome, colon cancer screening guidelines, and lower gastrointestinal bleeds.
- Provides a **concise overview of complex information** by integrating anatomical and physiological concepts with clinical scenarios.
- Compiles **Dr. Frank H. Netter's master medical artistry**—an aesthetic tribute and source of inspiration for medical professionals for over half a century—along with new art in the Netter tradition for each of the major body systems, making this volume a powerful and memorable tool for building foundational knowledge and educating patients or staff.
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DESCRIPTION

Offering a **concise, highly visual approach** to the basic science and clinical pathology of the digestive system, this updated volume in *The Netter Collection of Medical Illustrations* (the CIBA "Green Books") contains unparalleled didactic illustrations reflecting the latest medical knowledge. Revised by Drs. James C. Reynolds, Peter J. Ward, Suzanne Rose, Missale Solomon, and Christopher Steele, *Lower Digestive Tract, Part 2 of the Digestive System, Volume 9, integrates core concepts of anatomy, physiology, and other basic sciences with common clinical correlates across health, medical, and surgical disciplines. **Classic Netter art, updated and new illustrations, and modern imaging** continue to bring medical concepts to life and make this timeless work an essential resource for students, clinicians, and educators.*

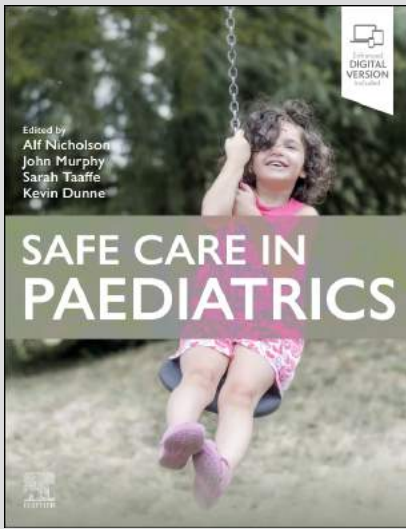
Medical Education Anatomy

<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



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Safe Care in Paediatrics

Alf Nicholson, FRCPI FRCPCH, Professor of Paediatrics and Head of the School of Medicine, RCSI Bahrain; **John Murphy**; **Sarah Taaffe**, Paediatric Lead in GP Training, Irish College of General Practitioners and **Kevin Dunne**, MD FRCPI, Professor of Paediatrics, RCSI Bahrain

ISBN: 9780443108853
PUB DATE: May 01, 2024
LIST PRICE: £44.99 / \$55.99 / €51.99
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 8.50w x 10.875h
PAGES: c. 16
AUDIENCE: Trainees in paediatrics, GP trainees, GPs, consultant paediatricians
BIC CODES: MJW
THEMA CLASSIFICATION: THEMAMKGT; THEMAMJ; THEMAMKG

Unique textbook on best practice for child health professionals

KEY FEATURES

The strengths of the book are:

- The ability to learn from other's experiences and mistakes and share this learning
- All chapters reviewed by sub-specialists in Paediatrics with a focus on presentations to first responders including family practitioners
- Instructive case scenarios highlighting clinical pearls and pitfalls to avoid
- High-quality clinical images throughout

Unique chapters on:

- Safe care for infants and children including the use of artificial intelligence
- Avoiding errors
- Picking up the sick child with practical tips especially for family doctors and first responders
- Potential pitfalls in both the newborn and 6-week examinations
- Unravelling the diagnosis in an infant or child with a fever
- Key symptoms and signs guiding family doctors to suspect cancer in childhood
- Mental health issues in adolescence
- Ordering and interpreting tests in children
- Surviving and thriving throughout a career in paediatric nursing or medicine

DESCRIPTION

Written by clinicians with years of experience in paediatrics, this unique textbook is designed to promote quality and safe care of children, and reduce common clinical errors and delayed diagnoses through shared first-hand experiences. This book is for anyone who needs to make a clinical decision about infants and children- be they from a medical, nursing or health professional background. The text is particularly useful for trainees but is also relevant to experienced practitioners.

The aim of the book is to prevent errors and ensure safe care. The authors offer practical advice on potential pitfalls and red flags from neonatal care to mental health issues in adolescence. This book takes the reader through recent advances in diagnosis, common presentations and how to identify the sick child, all with case studies and illustrations to bring the text to life.



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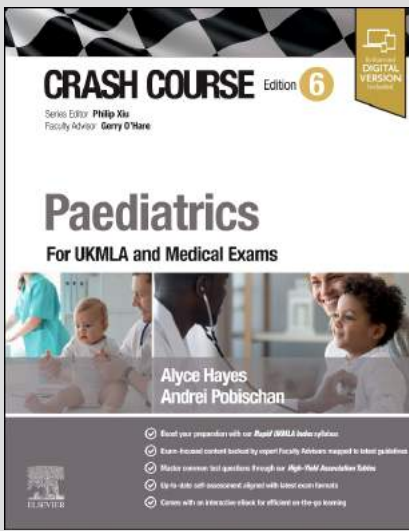
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<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



eBooks+



Crash Course Paediatrics, 6e

For UKMLA and Medical Exams

Alyce Hayes; Andrei Pobischan; Gerry O'Hare and Philip Xiu

ISBN: 9780443115370

PREVIOUS ISBN: 9780702073694

PUB DATE: May 01, 2024

LIST PRICE: £32.99 / \$40.99 / €38.99

DISCOUNT: Textbook

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 16

BIC CODES: MJW

THEMA CLASSIFICATION:

THEMAMKD

A Volume in the *CRASH COURSE* Series

KEY FEATURES

- Fully aligned to UKMLA requirements, with key 'conditions' and 'presentations' highlighted in handy checklists - save valuable revision time and be confident you have the syllabus covered
- Written by senior students and recent graduates - those closest to what is essential for exam success
- Quality assured by leading Faculty Advisors - ensures complete accuracy of information
- Features the ever popular 'Hints and Tips' boxes and other useful aide-mémoires - distilled wisdom from those in the know
- Updated self-assessment section matching the latest exam formats – confirm your understanding and improve exam technique fast

DESCRIPTION

Crash Course – your effective every-day study companion PLUS the perfect antidote for exam stress! Save time and be assured you have the essential information you need in one place to excel on your course and achieve exam success.

A winning formula now for over 25 years, having sold over 1 million copies and translated in over 8 languages, each series volume has been fine-tuned and fully updated with a full-colour layout tailored to make your life easier. Especially written by senior students or junior doctors – those who understand what is essential for exam success – with all information thoroughly checked and quality assured by expert *Faculty Advisers*, the result is books that exactly meet your needs and you know you can trust.

Each chapter guides you succinctly through the full range of curriculum topics in the UKMLA syllabus, integrating clinical considerations with the relevant basic science and avoiding unnecessary or confusing detail. A range of text boxes help you get to the hints, tips and key points you need fast! A fully revised self-assessment section matching the latest exam formats is included to check your understanding and aid exam preparation. The accompanying enhanced, downloadable eBook completes this invaluable learning package.



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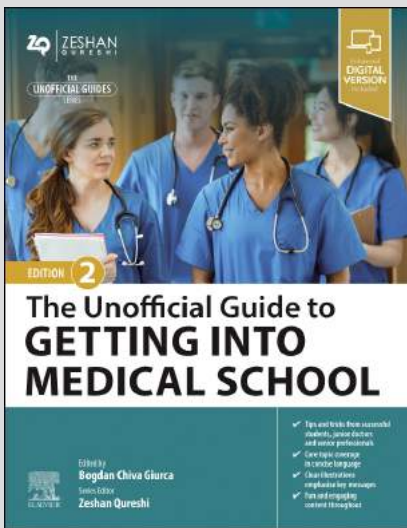
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<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



eBooks+



The Unofficial Guide to Getting Into Medical School, 2e

Edited by : **Bogdan Chiva Giurca**, BMBS ClinEnt MBA, University of Exeter Medical School, UK, NHS England Clinical Entrepreneur Fellow, NHS England National Student Champion for Social Prescribing and **Zeshan Qureshi**, BM, BSc (Hons), MSc, MRCPCH, FAcadMed, MRCP(S)(Glasg), Paediatric Registrar, London Deanery, United Kingdom

ISBN: 9780443113383
PREVIOUS ISBN: 9781910399224
PUB DATE: May 01, 2024
LIST PRICE: £29.99 / \$37.99 / €35.99
DISCOUNT: Textbook
FORMAT: Paperback
TRIM: 8.50w x 10.875h
PAGES: c. 0
AUDIENCE: Aspiring Medical Students
BIC CODES: MJ, MB, M
THEMA CLASSIFICATION: THEMAMRG

KEY FEATURES

- Unique, highly relevant and inspirational content, all based on real-life experiences
- Complete approach that focuses on every aspect of getting into medical school
- Written by doctors and medical students – full of tips and tricks that work
- Improve your application - covers what admission tutors are looking for when making their selection
- Blitz the interview – strategies and techniques, the top 120 most commonly encountered questions, plus all the extra-curricular background reading required
- Ace your entrance exams – 20-hour preparation strategy
- Write a fantastic personal statement - step-by-step support using previous successful examples
- Graduate medicine applications and dedicated section for international students
- Includes a section dedicated to international students

DESCRIPTION

This book is designed to help you become one of the few applicants to get into a highly competitive medicine degree, based on the insights of over 300 medical students across 32 UK medical schools.

Written in a clear and engaging style, the *Unofficial Guide* offers unique content to help you stand out from the crowd with useful tips and information at every stage of the process. It demystifies what you can expect from the degree, talks you through writing the application, covers what you need to know (and appear to know) for the interview, and provides a full guide to exam preparation.

Updated to incorporate recent post-COVID changes to the admission process, and full of real-life examples from those who have succeeded before you, this will be a much-cherished companion for every would-be doctor.



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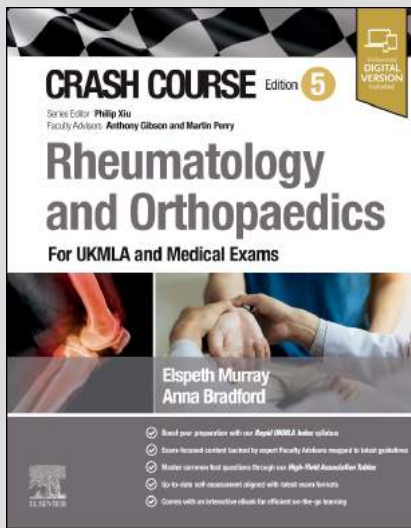
Medical Education UKNL Clinical Students

<https://virtuale.elsevier.com>, www.elsevier.com

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Crash Course Rheumatology and Orthopaedics, 5e

For UKMLA and Medical Exams

Anna Bradford; Elspeth Murray; Anthony Gibson, BA Oxon (Hons), MBBS, MRCS, Specialty Registrar, Trauma & Orthopaedics, Royal Alexandra Hospital, Paisley, UK; **Philip Xiu; Martin Perry**, MBChB, BSc(Hons), MRCP(UK), FHEA, MMed, Consultant Rheumatologist and Physician, Honorary Senior Clinical Lecturer, Royal Alexandra Hospital, Paisley and University of Glasgow, UK

ISBN: 9780443115356

PREVIOUS ISBN: 9780702073601

PUB DATE: May 01, 2024

LIST PRICE: £32.99 / \$40.99 / €38.99

DISCOUNT: Textbook

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 0

BIC CODES: MJM

THEMA CLASSIFICATION:

THEMAMJM

A Volume in the *CRASH COURSE* Series

KEY FEATURES

- Fully aligned to UKMLA requirements, with key 'conditions' and 'presentations' highlighted in handy checklists - save valuable revision time and be confident you have the syllabus covered
- Written by senior students and recent graduates - those closest to what is essential for exam success
- Quality assured by leading Faculty Advisors - ensures complete accuracy of information
- Features the ever popular 'Hints and Tips' boxes and other useful aide-mémoires - distilled wisdom from those in the know
- Updated self-assessment section matching the latest exam formats – confirm your understanding and improve exam technique fast

DESCRIPTION

Crash Course – your effective every-day study companion PLUS the perfect antidote for exam stress! Save time and be assured you have the essential information you need in one place to excel on your course and achieve exam success.

A winning formula now for over 25 years, having sold over 1 million copies and translated in over 8 languages, each series volume has been fine-tuned and fully updated with a full-colour layout tailored to make your life easier. Especially written by senior students or junior doctors – those who understand what is essential for exam success – with all information thoroughly checked and quality assured by expert *Faculty Advisers*, the result is books that exactly meet your needs and you know you can trust.

Each chapter guides you succinctly through the full range of curriculum topics in the UKMLA syllabus, integrating clinical considerations with the relevant basic science and avoiding unnecessary or confusing detail. A range of text boxes help you get to the hints, tips and key points you need fast! A fully revised self-assessment section matching the latest exam formats is included to check your understanding and aid exam preparation. The accompanying enhanced, downloadable eBook completes this invaluable learning package.



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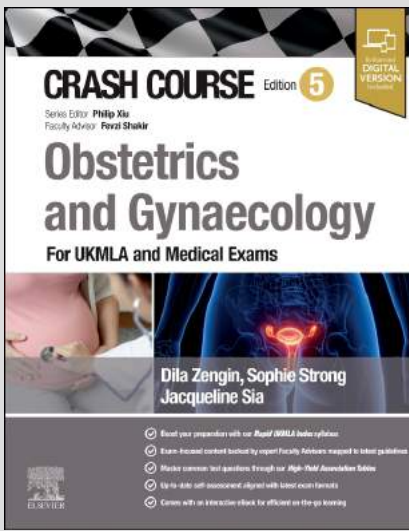
Medical Education UKNL Clinical
Students

<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



eBooks+



Crash Course Obstetrics and Gynaecology, 5e

For UKMLA and Medical Exams

Jacqueline Sia; Sophie Strong; Dila Zengin; Fevzi Shakir and Philip Xiu

ISBN: 9780443115363
PREVIOUS ISBN: 9780702073472
PUB DATE: May 01, 2024
LIST PRICE: £32.99 / \$40.99 / €38.99
DISCOUNT: Textbook
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 0
BIC CODES: GBC
THEMA CLASSIFICATION:
THEMAGBC

A Volume in the *CRASH COURSE* Series

KEY FEATURES

- Fully aligned to UKMLA requirements, with key 'conditions' and 'presentations' highlighted in handy checklists - save valuable revision time and be confident you have the syllabus covered
- Written by senior students and recent graduates - those closest to what is essential for exam success
- Quality assured by leading Faculty Advisors - ensures complete accuracy of information
- Features the ever popular 'Hints and Tips' boxes and other useful aide-mémoires - distilled wisdom from those in the know
- Updated self-assessment section matching the latest exam formats – confirm your understanding and improve exam technique fast

DESCRIPTION

Crash Course – your effective every-day study companion PLUS the perfect antidote for exam stress! Save time and be assured you have the essential information you need in one place to excel on your course and achieve exam success.

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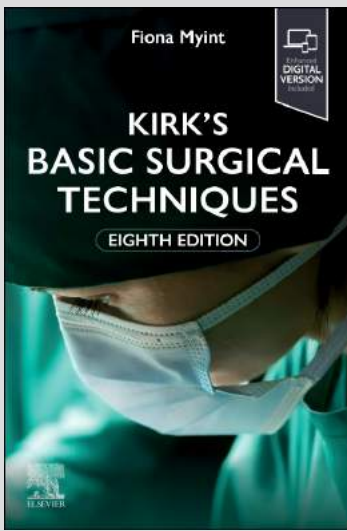
Medical Education UKNL Clinical
Students

<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



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Kirk's Basic Surgical Techniques, 8e

Fiona Myint, FRCS, Consultant in Vascular and General Surgery and Honorary Senior Lecturer, University College London, Royal Free Hospital

ISBN: 9780443113673

PREVIOUS ISBN: 9780702073212

PUB DATE: May 07, 2024

LIST PRICE: £43.99 / \$54.99 / €50.99

DISCOUNT: Textbook

FORMAT: Paperback

TRIM: 156 x 234

PAGES: c. 252

BIC CODES: MNC

THEMA CLASSIFICATION:

THEMAMNC

International Edition Available!

ISBN: 9780702073212

LIST PRICE: £20.99 / \$28.99 / €25.99

This edition is not for sale in Only International Edition

Back-to-basics guide for surgical trainees

KEY FEATURES

- Provides guidance on the full range of surgical techniques and skills required by all trainee surgeons
- Concentrates on the main principles behind the use of surgical techniques
- Key points boxes provide hints and tips to reinforce the main aspects of each technique

DESCRIPTION

Kirk's Basic Surgical Techniques provides a foundation on surgical technique to ensure operational success. Covering the basic techniques that every surgeon needs to know, across all specialties and subspecialties. Comprehensively reviewing the full range of surgical skills this book provides guidance on key operative skills, managing different situations, and handling the patient - all with clear 'how-to' explanations of each technique. This eighth edition has been thoroughly revised by Fiona Myint, a Consultant Vascular Surgeon at the Royal Free Hospital and Professor of Surgical Education at UCL. It maintains the clear, instructive style of its highly respected original author Professor R. M. Kirk.



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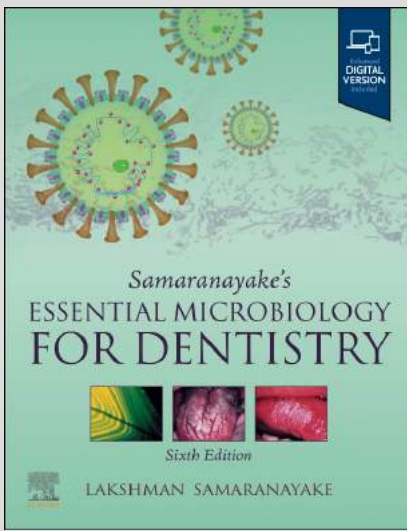
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Samaranayake's Essential Microbiology for Dentistry, 6e

Lakshman Samaranayake, DSc DDS FRCPATH FDSRCS(Edin) FRACDS FDSRCPS, Professor of Oral Microbiomics and Infection, School of Dentistry, University of Queensland, Australia; Professor Emeritus, University of Hong Kong and Professor – King James IV, Royal College of Surgeons of Edinburgh (2013).

ISBN: 9780443117213
PREVIOUS ISBN: 9780702074356
PUB DATE: May 03, 2024
LIST PRICE: £69.99 / \$86.99 / €81.99
DISCOUNT: Textbook
FORMAT: Paperback
TRIM: 8.50w x 10.875h
PAGES: c. 8
BIC CODES: MMD
THEMA CLASSIFICATION:
THEMAMKE

Microbiology explained for dental professionals worldwide – a refreshingly new edition of a popular tome!

KEY FEATURES

- Latest evidence throughout, updated to incorporate discoveries appertaining to the oral microbiome, and the international guidelines on infection control.
- Ample artwork and clinical pictures to explain complex structures, intricate pathological processes, and disease management principles.
- Friendly accessible writing style that helps students better understand and retain key information.
- Self-assessment tasks to monitor progress and prepare for graduate and postgraduate examinations
- Easy to follow - highlighted important information, and helpful summaries of key facts.
- A comprehensive glossary and a list of abbreviations
- An enhanced eBook version is included with purchase. The eBook allows you to access all the text, figures and references, with the ability to search, customise your content, make notes and highlights, and have content read aloud

DESCRIPTION

A sound knowledge of microbiology is essential for all dental professionals – it's the key to understanding major oral pathologies, from tooth decay to gum disease, as well as the regimentation of infection control in a successful dental practice. *Samaranayake's Essential Microbiology for Dentistry* once again, provides a comprehensive coverage of the basics of clinical oral microbiology and immunology and their relevance to oral disease, as well as the cotemporary discoveries of the oral microbiome, and the constituent flora. Both the novice student, as well as the experienced professionals are guided, in a stepwise manner, through a tour of the microbial world and how they impact oral health. The reasoned, bare bones approach to the essential elements of the subject is, as in previous editions fresh, lucid and logical. The sixth edition of this popular book, now translated into four different languages, has been fully revised and reformatted and includes brand new sections on emerging topics such as COVID-19 and infection control.



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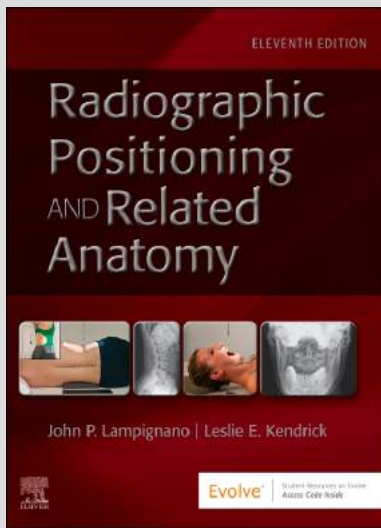
Health Professions I (HP1) UK
Dental

<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



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Textbook of Radiographic Positioning and Related Anatomy, 11e

Edited by : **John Lampignano**, MEd, RT(R) (CT), Retired Director Gateway Community College Phoenix, Arizona Visiting Professor Boise State University Boise, Idaho and **Leslie E. Kendrick**, MS, RT(R)(CT)(MR), Associate Professor, Program Director, Chair Department of Radiologic Sciences School of Allied Health Sciences College of Health Sciences Boise State University Boise, Idaho

ISBN: 9780323936132
PREVIOUS ISBN: 9780323653671
PUB DATE: May 27, 2024
LIST PRICE: £165.99 / \$226.99 / €185.99
DISCOUNT: Textbook
FORMAT: Hardback
TRIM: 9w x 11.875h
PAGES: c. 844
BIC CODES: MQH, MMP
THEMA CLASSIFICATION: THEMAMQH; THEMAMKS; THEMAMKSF

International Edition Available!

ISBN: 9780808922940
LIST PRICE: £61.99 / \$100.00 / €83.99
This edition is not for sale in Only EMEA IE territories

Gain the knowledge and skills you need to succeed as a radiologic technologist

KEY FEATURES

- **Labeled radiographs (radiographic overlays)** identify key radiographic anatomy and landmarks to help you recognize anatomy and determine if you have captured the correct diagnostic information on images.
- **Coverage of the latest ARRT® content specifications and ASRT curriculum guidelines** prepares you for certification exams and for clinical practice.
- **Display of just one projection per page in *Positioning* chapters** presents a manageable amount of information in an easily accessible format.
- **Positioning pages for projections** show positioning photographs plus radiographic and anatomy-labeled images side-by-side on a single page with written summaries of topics such as clinical indications, technical factors, patient and body part positions, recommended collimation field size, and evaluation criteria.
- **Clinical Indications sections on positioning pages** summarize conditions or pathologies that may be demonstrated by structures or tissues in an examination or projection.
- **Evaluation Criteria on positioning pages** describe the evaluation/critique process that should be completed for each radiographic image.
- **Pediatric, Geriatric, and Bariatric Patient Considerations** help you accommodate unique patient needs.
- **Critique images at the end of positioning chapters** test your understanding of common positioning and technical errors found in radiographs.
- **Review questions** are provided on the Evolve website.

DESCRIPTION

Gain the knowledge and skills you need to succeed as a radiologic technologist! **Textbook of Radiographic Positioning and Related Anatomy, 11th Edition** provides the essential information that you need to perform hundreds of radiographic procedures and produce clear, diagnostic-quality images. Easy-to-follow guidelines help you learn anatomy and positioning and minimize imaging errors. In fact, each positioning page spotlights just one projection, with bulleted information on the left side of the page and positioning photos, anatomical drawings, and correctly positioned and correctly exposed radiographic images on the right. Written by imaging experts John P. Lampignano and Leslie E. Kendrick, this book also provides excellent preparation for the ARRT® certification examination.



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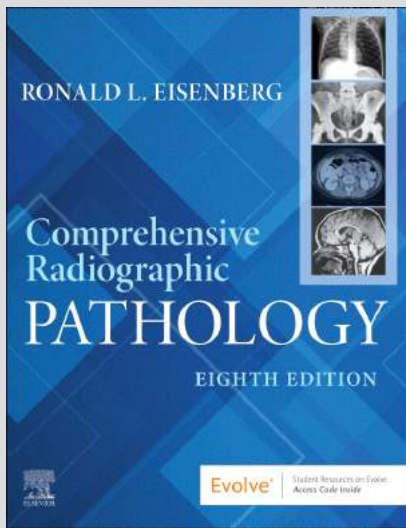
**Health Professions II (HP2)
Rad/Imaging Technology**

<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



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Comprehensive Radiographic Pathology, 8e

Ronald L. Eisenberg, MD, JD, FACR, Chairman of Radiology, Highland General Hospital, Oakland, CA; Clinical Professor of Radiology, University of California at San Francisco, San Francisco, CA and and University of California at Davis, Sacramento, CA

ISBN: 9780443121142
PREVIOUS ISBN: 9780323566704
PUB DATE: May 27, 2024
LIST PRICE: £87.99 / \$123.99 / €101.99
DISCOUNT: Textbook
FORMAT: Paperback
TRIM: 8.50w x 10.875h
PAGES: c. 460
BIC CODES: MMP
THEMA CLASSIFICATION:
THEMAMQH; THEMAMKS;
THEMAMKSF

Gain the pathology knowledge you need to produce quality radiographic images

KEY FEATURES

- **Radiographer Notes** provide helpful suggestions for producing optimal radiographs of each organ system, and include information on positioning and exposure factor adjustments for patients with specific conditions or handling requirements.
- **Hundreds of high-quality illustrations** cover all modalities, clearly demonstrating the clinical manifestations of different disease processes and providing a standard for the high-quality images needed in radiography practice.
- **Discussion of widely used imaging modalities** includes the advantages and limitations of ultrasound, computed tomography (CT), magnetic resonance imaging (MRI), nuclear medicine, single-photon emission computed tomography (SPECT), positron emission tomography (PET), and fusion imaging.
- **Summary tables** list the location and radiographic appearance of each disease as well as its treatment.
- **Recommended imaging procedures** are provided for each pathologic condition, along with the sequence for choosing and performing alternative imaging studies if necessary.
- **Review questions** help you assess your comprehension of the material in each chapter, with an answer key at the back of the book.
- **Thorough explanations** provide an understanding of the pathologies that can be diagnosed with medical imaging.
- **Systems-based approach** makes it easy to locate information and study one area at a time, helping you build an understanding of pathology.

DESCRIPTION

Gain the pathology knowledge you need to produce quality radiographic images! A fully illustrated, easy-to-follow guide, **Comprehensive Radiographic Pathology, 8th Edition** describes the pathologies that can be diagnosed with medical imaging. The book provides an understanding of the principles of pathology and explains how to recognize the radiographic appearance of specific diseases and conditions. By mastering the suggested imaging techniques, you will produce the high-resolution images that lead to accurate diagnoses. Written by Ronald L. Eisenberg, an experienced radiologist and educator, this book will help you become a more competent professional and a valued contributor to the diagnostic team.



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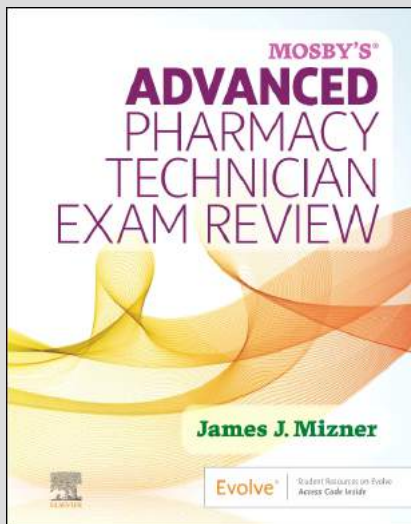


Health Professions II (HP2)
Rad/Imaging Technology
<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



eBooks+



Mosby's Advanced Pharmacy Technician Exam Review

James J. Mizner, Jr, RPh, MBA, Founder and President Panacea Solutions Consulting Reston, Virginia UNITED STATES

ISBN: 9780323935395
PUB DATE: May 16, 2024
LIST PRICE: £47.99 / \$65.99 / €55.99
DISCOUNT: Textbook
FORMAT: Paperback
TRIM: 8.50w x 10.875h
PAGES: c. 362
BIC CODES: MQP
THEMA CLASSIFICATION:
THEMAMQP

Take your career to the next level by becoming an **Advanced Certified Pharmacy Technician**

KEY FEATURES

- **Custom test generator on the Evolve companion website** features practice and exam modes and timer functionality to strengthen topic expertise and simulate nearly unlimited unique exams for practice.
- **Sample certification exams in the book** offer valuable test-taking experience.
- **Dedicated chapter covering sterile compounding** addresses an alternative pathway to certification as a Compounded Sterile Preparation Technician (CSPT).
- **Content review chapters** cover many advanced-level certification topics.
- **Chapter review questions** help reinforce knowledge and assess comprehension.
- **Many practice questions are available both in the print book and online** for convenient access.
- **Bulleted listing format** makes it easy to focus on reviewing the essentials.

DESCRIPTION

From bestselling test preparation author, James J. Mizner, comes **Mosby's® Advanced Pharmacy Technician Exam Review**. Available to Pharmacy Technicians with at least three years of work experience, the Advanced Certified Pharmacy Technician (CPhT-Adv) credential provides a pathway for obtaining higher-level skills and advancing your career. This new resource gives you the review and practice you need to prepare for the exam with an easy-to-use format, sample certification exams, content review chapters, and more. Make sure you're ready for exam and career success with this essential review!



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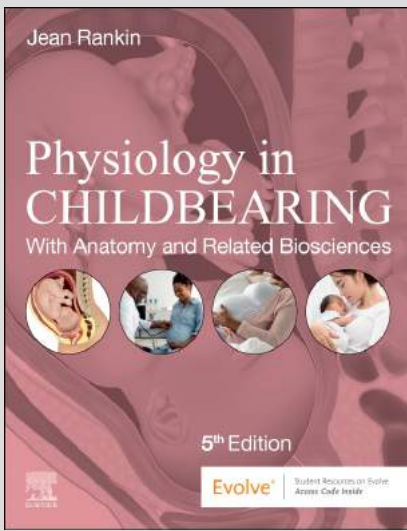


Health Professions II (HP2) Health
Occupation
<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



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Physiology in Childbearing, 5e

With Anatomy and Related Biosciences

Edited by : **Jean Rankin**, BSc(Hons) MSc PhD PGCE RN RMRGN RSCN, Professor (Maternal, Child and Family Health), School of Health, Nursing and Midwifery, University of the West of Scotland, Paisley and Hamilton, UK .

ISBN: 9780323930536

PREVIOUS ISBN: 9780702061882

PUB DATE: May 15, 2024

LIST PRICE: £41.99 / \$52.99 / €49.99

DISCOUNT: Textbook

FORMAT: Paperback

TRIM: 8.50w x 10.875h

PAGES: c. 0

BIC CODES: MQD

THEMA CLASSIFICATION:

THEMAMQD

Comprehensive guide for student midwives

KEY FEATURES

- Covers everything midwives need to know about physiology – comprehensive content suitable for both training and practising midwives
- Easy to read with straightforward language - ideal for students to master difficult concepts
- Clear, full-colour diagrams and images bring theory to life
- Demystifies basic biochemistry, cellular biology and genetics for those who have no prior knowledge of these subject areas
- Evidence-based approach to improve safety and quality of care for mothers and babies, both in the developed world and those countries where the provision of adequate care remains limited
- Helps the reader apply theory to practice, including how to recognise pathology and help prevent morbidity and mortality
- 'Main Points' boxes and online question bank with downloadable image collection to support learning

DESCRIPTION

With its straightforward writing style and extraordinary breadth of content, *Physiology in Childbearing* is an ideal textbook for students of midwifery wanting to master the physiology of pregnancy, childbirth, the neonate and breastfeeding.

This popular book has been fully updated to incorporate new knowledge and guidelines, and has a stronger focus on diversity. It covers basic biochemistry, cellular biology, genetics and fertility, as well as embryology and fetal growth, the physiology of pregnancy, and complications of labour. It then goes on to examine the neonate, infant feeding and bio-behavioural aspects of parenting.

The complexities of this fundamental topic area are explained with boxes of key points, full colour diagrams and images, and tips on applying content to practice, making this book a must-have for students and practising midwives alike.



*Prices are subject to change without notice. All Rights Reserved.



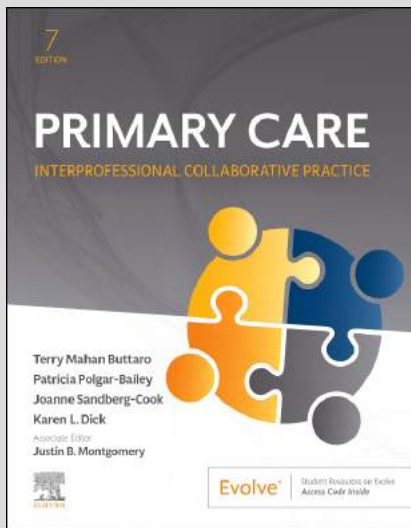
Nursing UK Midwifery Edu

<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



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Primary Care, 7e

Interprofessional Collaborative Practice

Edited by : **Terry Mahan Buttaro**, PhD, AGPCNP-BC, FAANP, FNAP, Clinical Assistant Professor, Coastal Medical Associates, Salisbury, Massachusetts; University of Massachusetts Boston, Boston, Massachusetts; **Patricia Polgar-Bailey**, PsyD, MPH, FNP-BC, CDE, BC-ADM, Family Nurse Practitioner and Integrative Care Provider, Charlottesville Free Clinic; Clinical Psychologist, Blue Mountains Health, Charlottesville, Virginia; **Joanne Sandberg-Cook**, MS, APRN, ANP/GNP-BC, Adult/Gerontologic Nurse Practitioner (retired), Dartmouth-Hitchcock Medical Center, Dartmouth-Hitchcock at Kendal, Hanover, New Hampshire; Director, Community Nurse of Thetford, Inc, Thetford Center, Vermont; **Karen L. Dick**, PhD, GNP-BC, FAANP, Associate Professor, Tan Chingfen Graduate School of Nursing, UMASS Chan Medical School, Worcester, Massachusetts; Nurse Practitioner, Hebrew Senior Life, Boston, Massachusetts

ISBN: 9780323935845
PREVIOUS ISBN: 9780323570152
PUB DATE: May 13, 2024
LIST PRICE: £127.99 / \$177.99 / €142.99
DISCOUNT: Textbook
FORMAT: Paperback
TRIM: 8.50w x 10.875h
PAGES: c. 1592
ILLUSTRATIONS: 175 images
BIC CODES:
THEMA CLASSIFICATION:
THEMAMQC

Your complete guide to delivering interprofessional collaborative care for adult primary care patients

KEY FEATURES

- **Comprehensive, evidence-based, accurate, and current content** provides a complete foundation in the primary care of adults for NP students, including students in Doctor of Nursing Practice (DNP) programs, and reflects the latest research and national and international guidelines.
- **UNIQUE! Interprofessional collaborative approach** equips you for interprofessional collaborative practice in the contemporary healthcare environment.
- **Consistent chapter format and features** reflect the systematic approach used in adult primary care practice to promote improved clinical judgment skills, facilitate learning, and foster quick clinical reference.
- **UNIQUE! Referral/Consultation highlights** indicate when the NP should collaborate with, or refer to, other providers.
- **UNIQUE! Emergency Referral highlights** indicate when the NP should refer the patient for urgent/emergent care.
- **UNIQUE! Red Flag highlights** indicate issues not to be missed.
- **UNIQUE! Initial Diagnostics boxes** provide quick reference to key decision-making content.

DESCRIPTION

There's no better preparation for Nurse Practitioners and other adult primary care practitioners! Buttaro's **Primary Care: Interprofessional Collaborative Practice, 7th Edition** provides the concise yet thorough information that you need in today's fast-paced, interprofessional, collaborative environment. With authorship reflecting both academic and clinical expertise, this comprehensive, evidence-based primary care text/reference shows you how to deliver effective, truly interdisciplinary health care. It covers every major adult disorder seen in the outpatient office setting and features a unique interprofessional collaborative approach with referral and "Red Flag" highlights and more. New to this edition are chapters on health equity, public health preparedness, endocannabinoids, and self-care.



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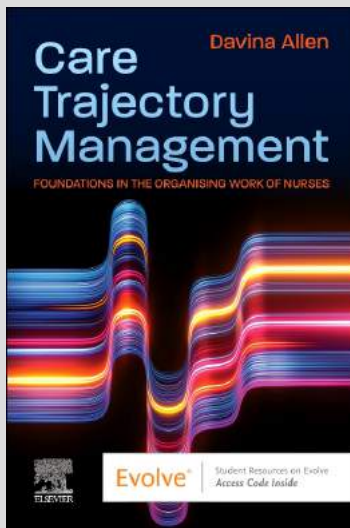
Nursing Nursing

<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



eBooks+



Care Trajectory Management

Foundations in the organising work of nurses

Davina Allen, RN; BA(Hons) and PhD, Professor and Head of Research and Innovation, School of Healthcare Sciences, Cardiff University, Cardiff, United Kingdom

ISBN: 9780443107535
PUB DATE: May 13, 2024
LIST PRICE: £29.99 / \$37.99 / €35.99
DISCOUNT: Textbook
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 0
BIC CODES: MQC
THEMA CLASSIFICATION:
THEMAMQC

The essentials of nurses' organising work

KEY FEATURES

- The first textbook of its kind – a valuable resource for both experienced nurses and undergraduates
- Evidence-based – derived from research led by the author

Covers:

- The history of nursing's professional development
 - Professional identity
 - Healthcare quality and safety
 - Healthcare systems
 - Managing complexity
 - Care coordination
 - Tacit knowledge
 - Nursing theory
 - Organising work
 - Care Trajectory Management Framework
 - Translational mobilisation theory
-
- Illustrative case studies based on observational studies bring theory to life
 - Exercises, quick quizzes and reflective practice help to apply learning
 - Online downloadable workbooks to organise learning

DESCRIPTION

'Care trajectory management' refers to the work that nurses do to coordinate and organise patient care. It's a relatively unseen element of the nursing role that is absolutely vital for patient safety and quality care.

Care Trajectory Management for Nurses is the first ever textbook of its kind for nurse educators, practice facilitators and policy makers as well as undergraduate nurses. It is both a theoretical and practical resource covering the concepts and theories around the organisational components of nursing practice, derived from the research of nurse academic Davina Allen.

This excellent book will help prepare nurses to be the 'glue' in increasingly complex healthcare systems, and provides an excellent foundation for embedding this



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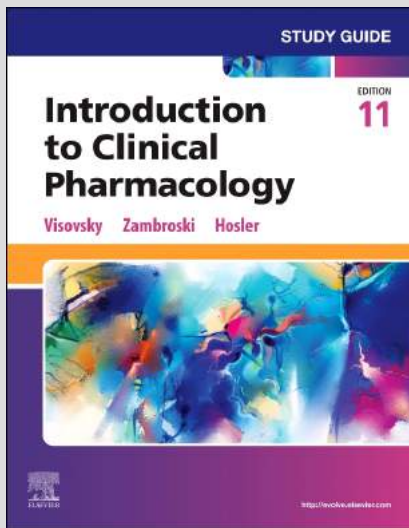
Nursing UK Post - Registration

<https://virtuale.elsevier.com>, www.elsevier.com

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Study Guide for Introduction to Clinical Pharmacology, 11e

Constance G Visovsky, PhD, RN, ACNP-BC, FAAN, Professor and Lewis & Leona Hughes Endowed Chair in Nursing Science, College of Nursing, University of South Florida, Tampa, Florida

ISBN: 9780443115028
PREVIOUS ISBN: 9780323761222
PUB DATE: May 10, 2024
LIST PRICE: £34.99 / \$42.99 / €40.99
DISCOUNT: Textbook
FORMAT: Paperback
TRIM: 8.50w x 10.875h
PAGES: c. 0
BIC CODES: MQC
THEMA CLASSIFICATION:
THEMAMQC; THEMAMQCM

Reinforce your understanding of nursing pharmacology with this practical study guide

KEY FEATURES

- **Alternate item-format review questions** prepare you for the Next Generation NCLEX® (NGN) exam.
- **Variety of exercises** reinforces your understanding with matching, multiple-choice, fill-in-the-blank, true or false, and select-all-that-apply questions, as well as crossword puzzles.
- **Practice quizzes** provide preparation for course and licensure exams.
- **Reader-friendly writing style and organization** makes the content easier to understand.

DESCRIPTION

Reinforce your understanding of nursing pharmacology with this practical study guide! Corresponding chapter by chapter to *Introduction to Clinical Pharmacology, 11th Edition*, this workbook provides the practice and review needed to help you master pharmacology knowledge and prepare for the NCLEX-PN® Examination. A variety of questions includes a math review, dosage calculation exercises, and case studies that emphasize clinical decision-making and prioritization. It's the ideal study tool and review companion for your textbook!



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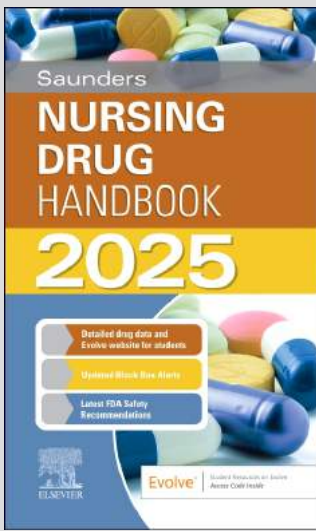
Nursing LPN Nursing

<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



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Saunders Nursing Drug Handbook 2025

Robert Kizior, BS, RPh, Pharmacist (retired), Department of Pharmacy, Alexian Brothers Medical Center, Elk Grove Village, Illinois.; Former Adjunct Faculty Member at William Rainey Harper Community College, Palatine, Illinois and **Keith Hodgson**, RN, BSN, CCRN

ISBN: 9780443120480
PREVIOUS ISBN: 9780443116070
PUB DATE: May 09, 2024
LIST PRICE: £33.99 / \$41.99 / €39.99
DISCOUNT: Textbook
FORMAT: Paperback
TRIM: [x] 111 x 187
PAGES: c. 1520
BIC CODES: MMG
THEMA CLASSIFICATION:
THEMAMKG

Ensure safe and effective drug therapy with this easy-to-use handbook

KEY FEATURES

- **More than 1,000 generic name drugs**, encompassing over 4,000 trade name drugs, are organized alphabetically with A-to-Z tabs for quick and easy access.
- **UNIQUE! Herbal information** is included in the appendix and on the companion Evolve website, covering the interactions and effects of commonly encountered herbs.
- **Detailed information for each drug** includes side effects listed by frequency, and adverse effects and reactions requiring prompt intervention.
- **Drugs by Disorder** are listed in the front of the book for easy reference, showing common disorders and the drugs most often used for treatment.
- **Drug Classifications section** features an overview of actions and uses for drug families.
- **Black Box Alerts and High Alert drugs** are highlighted to promote safe administration of drugs that pose the greatest risk for patient harm, and *Do Not Confuse With* warnings call out drug names that sound alike or look alike.
- **Top 100 Drugs list** helps you easily identify the most frequently administered drugs.
- **Cross-references to the 400 top U.S. brand-name drugs** are located throughout the book for easy access.
- **List of newly approved medications** in the front of the book makes it easy to locate the latest drugs.
- **Nursing considerations** are organized in a functional nursing process framework and include baseline assessment, intervention/evaluation, and patient/family teaching.

DESCRIPTION

Ensure safe and effective drug therapy with this easy-to-use handbook! Organized alphabetically for quick reference, **Saunders Nursing Drug Handbook 2025** provides current, detailed information on more than 1,000 generic and 4,000 trade name drugs — including 19 new FDA-approved medications.



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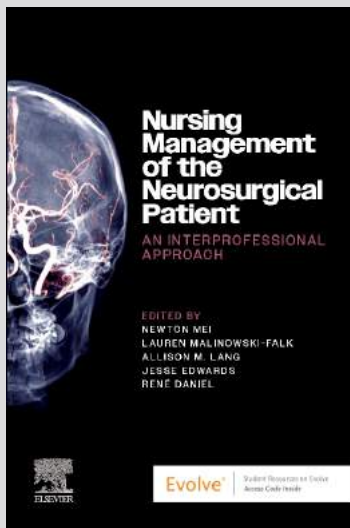


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Nursing Management of the Neurosurgical Patient: An Interprofessional Approach

Edited by : **Newton Mei**, MD, Director of Education, Departments of Medicine and Neurological Surgery, Thomas Jefferson University, Philadelphia, Pennsylvania; **Lauren Malinowski-Falk**, CRNP, Nurse Practitioner, Medicine, Neurological Surgery, Spine Unit and iNICU, Thomas Jefferson University, Philadelphia, Pennsylvania; **Allison M. Lang**, MSN, CRNP, AGACNP-BC, Nurse Practitioner, Neurological Surgery, Spine Unit and iNICU, Thomas Jefferson University; **Jesse Edwards**, MD, Assistant Professor of Medicine Farber Hospitalist Departments of Medicine and Neurological Surgery, Thomas Jefferson University, Philadelphia, Pennsylvania

ISBN: 9780323934473
PUB DATE: May 01, 2024
LIST PRICE: £50.99 / \$62.99 / €59.99
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 352
BIC CODES: MQQL2
THEMA CLASSIFICATION:
THEMAMQL2

Use this new text/reference from a nationally recognized center of excellence to ensure optimal neurosurgical nursing care

KEY FEATURES

- **Team-based, interprofessional collaborative, evidence-based approach** provides an in-depth guide to neurosurgical nursing care.
- **Consistent, streamlined format** serves well as both a textbook and a reference for clinical settings.
- **Abundant, easy-to-reference algorithms** help you respond quickly and effectively to resolve neurosurgical patient problems.
- **Discussion and Nursing Considerations sections** are provided in every chapter to describe the practical application of key chapter content.
- **Case study with application-level questions** is included in every chapter to help you apply key content to neurosurgical nursing practice.
- **Answer key for each case study** is provided in every chapter to reinforce understanding and provide remediation.
- **Interprofessional collaborative authorship** provides wide-ranging expertise, with each chapter written by a team consisting of a neuroscience nurse or Nurse Practitioner, a neurosurgeon, and a hospitalist physician.

DESCRIPTION

Use this new text/reference from a nationally recognized center of excellence to ensure high quality nursing care of neurosurgical patients! **Nursing Management of the Neurosurgical Patient: An Interprofessional Approach** is a concise new resource for best practices in both neurosurgery-specific nursing care and general hospital care. Topics include everything from preoperative assessment and bedside management to common procedures and pathophysiology of the brain and spine; neurosurgical issues such as diabetes, acute kidney injury, and coronary conditions; and pain management, substance abuse, and rehabilitation. A reader-friendly style includes photos, algorithms, flowcharts, and checklists to make it easy to find essential information quickly. Written by experienced neuroscience nurses and Nurse Practitioners, neurosurgeons, and hospitalist physicians, this book uses a team-based, collaborative approach to neurosurgical nursing care.



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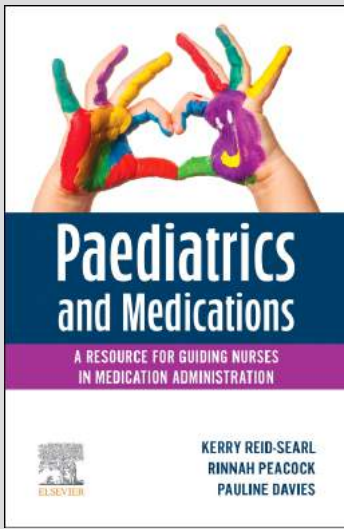


Nursing Nursing
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Paediatrics and Medications: A Resource for Guiding Nurses in Medication Administration

Kerry Reid-Searl, AM, RN, RM, BHlthSc, MClIn Ed, PhD, Head of Innovation and Simulation, University of Tasmania; Clinical Nurse Educator, Queensland Health; Creator of Mask-Ed and Pup-Ed (KRS Simulation); Emeritus Professor, CQUniversity, QLD; Adjunct Professor, Monash, VIC; **Pauline Davies**, Clinical Facilitator, Associate Regional Case Manager, Paediatrics, Rockhampton Hospital Campus/ Paediatric Ward, Central Queensland Hospital and Health Service, Queensland Government; **Rinnah Peacock**, Graduate Nurse Educator and Regional Case Manager, Paediatric Oncology and Haematology Education and Research Unit, Director COVID Response and Quarantine Accommodation, Central Queensland Hospital and Health Service, Queensland Government and Adjunct Lecturer, CQUniversity, QLD

ISBN: 9780729544641
PUB DATE: May 01, 2024
LIST PRICE: £28.99 / \$35.99 / €33.99
DISCOUNT: Textbook
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 250
BIC CODES: MQCL3
THEMA CLASSIFICATION:
THEMAMQCL3

DESCRIPTION

"Paediatrics and Medications: A Resource for Guiding Nurses in Medication Administration" is an indispensable guide tailored specifically for nurses navigating the intricate realm of pediatric medication administration. Authored by Reid-Searl, Davies & Peacock, this comprehensive resource offers a wealth of knowledge and practical insights essential for ensuring safe and effective medication practices in pediatric care settings.



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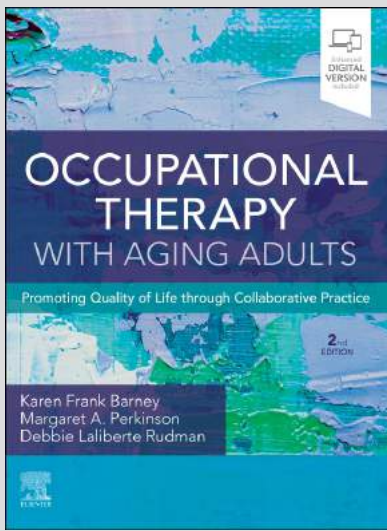
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Education ANZ

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Occupational Therapy with Aging Adults, 2e

Promoting Quality of Life through Collaborative Practice

Edited by : **Karen Frank Barney**, PhD, MS, OTR/L, FAOTA, Professor Emerita; AOTF Development & Scholarship Committees; Founder, Transformative Justice Initiative & OT Transition and Integration Services; Chair, 2004-2013 Department of Occupational Science & Occupational Therapy; Geriatric Education Center Faculty, 1990-2013; Interim Director, Prison Education Program, 2013-2015; Saint Louis University, St. Louis, MO and **Margaret Perkinson**, PhD, FGSA, FAGHE, FSfAA, Past Director, Center on Aging, University of Hawaii

ISBN: 9780323877985

PREVIOUS ISBN: 9780323067768

PUB DATE: May 31, 2024

LIST PRICE: £53.99 / \$74.99 / €62.99

DISCOUNT: Textbook

FORMAT: Hardback

TRIM: 8.50w x 10.875h

PAGES: c. 536

AUDIENCE: Occupational Therapy students Doctor of Occupational Therapy (DOT) 36 accredited programs (46 candidate, 90 applicant) 3,901 students enrolled Master of Occupational Therapy (MOT) 127 accredited programs (12 candidate, 19 applicant) 18,743 students enrolled Occupational Therapy practitioners 143,300

BIC CODES: MQT, MJ

THEMA CLASSIFICATION:

THEMAMJ; THEMAMQT;

THEMAMKN

Learn to work holistically, creatively, and collaboratively at micro to macro levels when caring for aging adults

KEY FEATURES

- **UNIQUE! Intraprofessional and interprofessional approach to intervention** emphasizes working holistically and collaboratively in serving older adults.
- **UNIQUE! Chapter on the wide range of physiological, musculoskeletal, and neurological changes among the aging patient population** highlights related occupational performance issues.
- **Case examples** help you learn to apply new information to actual client and community situations.
- **Chapter on evidence-based practice** discusses how to incorporate evidence into clinical or community settings.
- **Questions at the end of each chapter** can be used for discussion or other learning applications.
- **UNIQUE! Chapters on nutrition, food insecurity, and oral health** explore related challenges faced by older adults.
- **Chapter on ethics** provides a deeper understanding of how to address challenging ethical dilemmas.

DESCRIPTION

Get all the information you need to work holistically, creatively, and collaboratively when providing services for older adults with Karen Frank Barney, Margaret A. Perkinson, and Debbie Laliberte Rudman's **Occupational Therapy with Aging Adults, 2nd Edition**. Emphasizing evidence-based, occupation-based practice and a collaborative, interdisciplinary approach, this text walks students and practitioners through the full range of gerontological occupational therapy practice, inclusive of working with individual clients to working at systems and societal levels. Over 80 leaders in their respective topical areas contributed to the book's 33 chapters, including the conceptual foundations and principles of gerontological occupational therapy, bio-psychosocial age-related changes, environmental forces shaping occupational participation for older adults, the continuum of health care as well as implications for communities, and the attributes, ethical responsibilities, and roles involved in gerontological occupational therapy.



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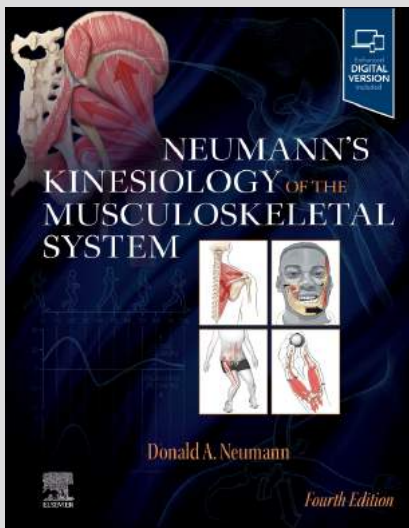
Health Professions I (HP1)
Occupational Therapy

<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



eBooks+



Neumann's Kinesiology of the Musculoskeletal System, 4e

Donald A. Neumann, PT, Ph.D., FAPTA, Professor, Department of Physical Therapy and Exercise Science, College of Health Sciences, Marquette University, Milwaukee, WI

ISBN: 9780323718592

PREVIOUS ISBN: 9780323287531

PUB DATE: May 20, 2024

LIST PRICE: £82.99 / \$121.99 /

€92.99

DISCOUNT: Textbook

FORMAT: Hardback

TRIM: 8.50w x 10.875h

PAGES: c. 782

AUDIENCE: Physical Therapy (DPT)

students – 243 accredited programs;

17 developing programs; 31,380

students enrolled

BIC CODES: MQS, MMS, MXH

Master the principles of kinesiology as they relate to physical rehabilitation practice

KEY FEATURES

- **Evidence-based approach** emphasizes the importance of research in PT decision-making.
- **More than 900 high-quality illustrations** provide visual accompaniments to clarify the material.
- **Clinical Connections boxes** at the end of each chapter highlight or expand upon a particular clinical concept associated with the kinesiology covered in the chapter.
- **Special Focus boxes** throughout the text provide numerous clinical examples to demonstrate why kinesiological information is needed.
- **Critical thinking questions** for selected chapters reinforce the main concepts.

DESCRIPTION

With a focus on the normal and abnormal mechanical interactions between the muscles and joints of the body, **Neumann's Kinesiology of the Musculoskeletal System, 4th Edition** provides a foundation for the practice of physical rehabilitation. This comprehensive, research-based core text explores kinesiology as it relates to physical rehabilitation in a clinically relevant and accessible manner. It presents the language of human movement — and acts as a bridge between basic science and clinical management. It helps clinicians effectively address the mechanical-based changes in movement across a person's lifespan, whether in the context of rehabilitation, recreation, or promotion of health and wellness. Full-color anatomic and kinesiological illustrations clearly demonstrate the anatomy, functional movement, and biomechanical principles underlying movement and posture. An eBook version, *included with print purchase*, provides access to all the text, figures, and references, with the ability to search, customize content, make notes and highlights, and have content read aloud. The eBook *included with print purchase* also features multiple excellent videos of anatomic and kinesiological principles, answers to study questions from the print book, and additional tables and figures.



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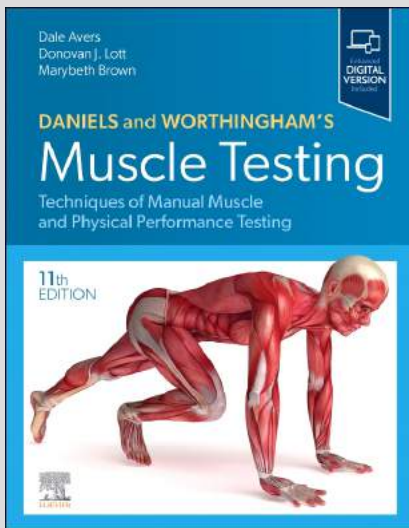
Health Professions I (HP1) Physical Therapy

<https://virtuale.elsevier.com>, www.elsevier.com

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Daniels and Worthingham's Muscle Testing, 11e

Techniques of Manual Muscle and Physical Performance Testing

Dale Avers, PT, DPT, PhD, FAPTA, Professor, Department of Physical Therapy Education, College of Health Professions, SUNY Upstate Medical University, Syracuse, New York;
Donovan J. Lott, PT, PhD, CSCS and **Marybeth Brown**, PT, PhD, FACSM, FAPTA, Professor Department of Physical Therapy University of Missouri School of Health Professions Columbia, Missouri

ISBN: 9780323824200
PREVIOUS ISBN: 9780323569149
PUB DATE: May 13, 2024
LIST PRICE: £82.99 / \$117.99 / €92.99
DISCOUNT: Textbook
FORMAT: Spiral bound
TRIM: 8.50w x 10.875h
PAGES: c. 435
AUDIENCE: Physical Therapy (DPT) students – 243 accredited programs; 17 developing programs; 31,380 students enrolled Physical Therapy Assistant (PTA) students – 360 accredited programs; 40 developing programs; 12,945 students enrolled Occupational Therapy students— Doctor of Occupational Therapy (DOT) 20 accredited programs 2,086 students enrolled Master of Occupational Therapy (MOT) 162 accredited programs 19,262 students enrolled Occupational Therapy Assistant (OTA) 215 accredited programs 9,580 students enrolled
BIC CODES: MQS, MX

International Edition Available!

ISBN: 9780808900115
LIST PRICE: £27.99 / €37.99
This edition is not for sale in Only HS IE Reference (Excluding Caribbean & Latin America)



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Gain a thorough understanding of procedures and clinical decision making in manual muscle testing and physical performance testing

KEY FEATURES

- **Drawings and arrows, along with clear written directions**, make it easy to understand and perform muscle testing procedures to assess deficits in strength, balance, and range of motion.
- **More than 500 illustrations** clearly show testing sequences, muscle anatomy, and muscle innervation.
- **Content on the muscle dynamometer and muscle dynamometry data** introduces you to muscle dynamometry, including muscle dynamometer methods and results with each muscle.
- **Ideal exercises for selected muscles** thoroughly explain procedures based on the literature.
- **Chapter on functional performance testing** covers functional strength testing in older adults and those with functional decline, and testing muscle performance in various clinical settings.
- **Chapter on strength testing** for active populations includes a variety of tests appropriate for many settings with reference data for comparison.
- Chapters on **manual muscle testing** address how to enhance the reliability and validity of manual muscle testing and other practical considerations of manual muscle testing.
- **Details of muscle anatomy and innervation** help in linking muscle topography with function.

DESCRIPTION

Daniels and Worthingham's Muscle Testing, 11th Edition offers the clear information needed to master procedures and enhance clinical decision making in manual muscle testing and performance testing. Comprehensive discussion of the value of strength testing with clear, illustrated instructions provide a detailed guide to patient positioning, clinician instructions, and application of skill. In addition to updated muscle testing of normal individuals and others with weakness or paralysis, this edition includes updated information on alternative strength and performance tests for all adult populations. Updated comprehensive coverage for muscle dynamometry and ideal exercises enhances this texts' relevance for today's clinician. An eBook version *included with print purchase* provides access to all the text, figures, and references, with the ability to search, customize content, make notes and highlights, and have content read aloud.

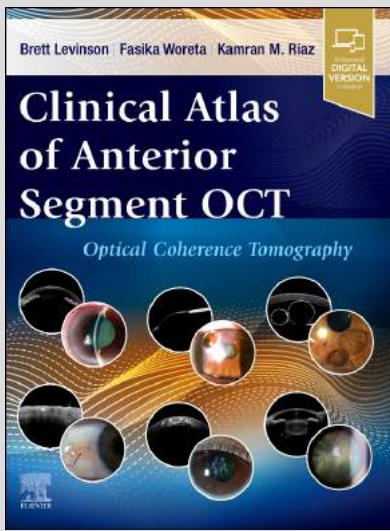
Health Professions I (HP1) Physical Therapy

<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



eBooks+



Clinical Atlas of Anterior Segment OCT: Optical Coherence Tomography

Edited by : **Brett Levinson**, MD, Specialized Eye Care, Greater Baltimore Medical Center, Baltimore, MD; **Faskia Woreta**, MD, MPH and **Kamran Riaz**, MD, Clinical Professor of Ophthalmology, Director of Medical Student Education, Dean McGee Eye Institute, Oklahoma City, OK

ISBN: 9780443120466
PUB DATE: May 24, 2024
LIST PRICE: £161.99 / \$199.99 / €188.99
DISCOUNT: Reference
FORMAT: Hardback
TRIM: 8.50w x 10.875h
PAGES: c. 330
AUDIENCE: Ophthalmologists; ophthalmology residents
BIC CODES: MJQ
THEMA CLASSIFICATION: THEMAMJQ

Make the most of every use of your OCT in clinical practice

KEY FEATURES

- Covers the **entire normal anatomy of the anterior segment and pathology of the conjunctiva, corneal epithelium, stroma and endothelium**, lens, iris, anatomic angle, and clinical settings such as trauma, infection, inflammation, and contact lens fitting.
- Includes information on using AS-OCT in clinical and surgical settings (intraoperative AS-OCT).
- Provides rich visual guidance with over **500+ high-quality figures** (anterior segment OCT imaging and clinical photos) comparing normal anatomy and a wide range of pathology, including both common and rare disorders and how to differentiate frequently confused conditions.
- Provides a **well-rounded perspective of AS-OCT**, including how to use, understand, and capture images.
- **Links high-quality slit lamp images to the corresponding AS-OCT image** with clear labels to show the pathology side by side.
- Features **clinical pearls in each chapter** to relate key AS-OCT and clinical findings to everyday practice.
- **An eBook version is included with purchase.** The eBook allows you to access all of the text, figures, and references, with the ability to search, customize your content, make notes and highlights, and have content read aloud.

DESCRIPTION

While eye care providers are thoroughly familiar with the use of optical coherence tomography (OCT) in the diagnosis and management of glaucoma and retinal diseases, many are not as familiar with its **myriad uses for the diagnosis of corneal and anterior segment conditions**. Anterior segment OCT (AS-OCT) can help to differentiate between various corneal pathologies, show the anatomy of the angles, obtain information about the lens-capsule complex, and guide contact lens fitting, among many other clinical uses. *Clinical Atlas of Anterior Segment OCT* expertly **guides clinicians through all aspects of AS-OCT** with hundreds of high-quality OCT images that highlight the utility of AS-OCT in diagnosing and managing a wide spectrum of anterior segment diseases.



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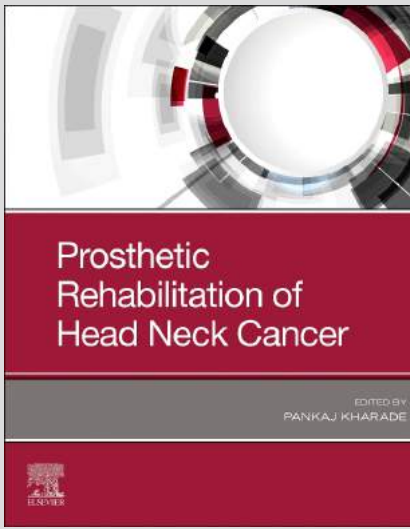


Speciality Medicine Ophthalmology
Surgery
<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



eBooks+



Prosthetic Rehabilitation of Head and Neck Cancer Patients

Edited by : **Pankaj Prakash Kharade**, MD, FDPS, FJPS, Assistant Professor, Department of Prosthodontics, Faculty of Medicine, Aligarh Muslim University, Aligarh, Uttar Pradesh, India

ISBN: 9780323823944
PUB DATE: May 13, 2024
LIST PRICE: £107.99 / \$136.99 / €120.99
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 324
AUDIENCE: Otolaryngologists, Head and Neck Surgeons
BIC CODES: MJP
THEMA CLASSIFICATION: THEMAMJP

The latest multidisciplinary approaches to the treatment and rehabilitation of head and neck cancers

KEY FEATURES

- Discusses rehabilitation of various defects in the head neck region due to surgical resection of tumors with newly available technology.
- Covers interdisciplinary surgical management, including both prosthetic treatment and psychosocial management related to craniomaxillofacial rehabilitation, with a focus on improving patients' quality of life.
- Offers a multidisciplinary approach with valuable contributions from a variety of specialists with experience in head and neck cancer rehabilitation.

DESCRIPTION

The management of malignant tumors associated with the maxilla, tongue, floor of the mouth, mandible, and adjacent structures represents a difficult challenge for the surgical specialist and prosthodontist regarding both control of the primary disease and rehabilitation following surgical treatment. Prosthetic Rehabilitation of Head Neck Cancer Patients is an easy-to-read clinical guide covering the latest multidisciplinary approaches to the treatment of head and neck cancers — from effective surgical management to psychosocial aspects and improved quality of life.



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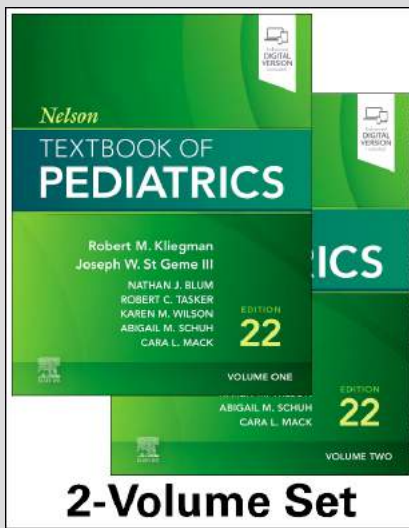


Speciality Medicine Otolaryngology
Surgery
<https://virtuale.elsevier.com>, www.elsevier.com

Also includes resources via:



eBooks+



Nelson Textbook of Pediatrics, 2-Volume Set, 22e

Edited by : **Robert M. Kliegman**, MD, Professor & Chair Emeritus, Department of Pediatrics - Medical College of Wisconsin Nelson Undiagnosed & Rare Disease Program; **Joseph W. St. Geme III**, MD, Chair, Department of Pediatrics, Professor of Pediatrics and Microbiology, Perelman School of Medicine at the University of Pennsylvania and Physician-in-Chief, Leonard and Madlyn Abramson Endowed Chair in Pediatrics, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

ISBN: 9780323883054
PREVIOUS ISBN: 9780323529501
PUB DATE: May 31, 2024
LIST PRICE: £144.99 / \$178.99 / €165.99

DISCOUNT: Reference
FORMAT: Hardback
TRIM: 8.50w x 10.875h
PAGES: c. 4740
ILLUSTRATIONS: 2627
AUDIENCE: Pediatric residents and practitioners (75,000 in the US; 200,000 ROW)
BIC CODES: MJW
THEMA CLASSIFICATION: THEMAMKD

International Edition Available!

ISBN: 9780808922629
LIST PRICE: £20.99 / \$23.00 / €30.99

The gold standard reference in pediatrics—comprehensive, authoritative, and reader-friendly

KEY FEATURES

- Features a **user-friendly format** with short chapters and subchapters that allow you to quickly find the information you need.
- Includes **more than 60 new chapters** on topics covering the impact of social factors on children's health, the impact of genetic discoveries on understanding diagnosing and treating childhood diseases, updating of current evidenced based diagnostic and therapeutic approaches to childhood diseases, and more.
- Offers **new and expanded information** on gene therapy; interferonopathies; reactive infectious mucocutaneous eruption (RIME); e-cigarette or vaping use-associated lung injury (EVALI); monkeypox; food protein-induced enterocolitis syndrome (FPIES); signaling pathway disorders; ciliopathies; very early onset inflammatory bowel disease; Epstein-Barr virus susceptibility disorders; marijuana smoke exposure; and much more.
- Features **hundreds of new figures and tables** throughout for visual clarity and quick reference, real-time videos, and **regular updates online**, written exclusively for Nelson.
- Provides fresh perspectives from **two new associate editors**: Abigail M. Schuh and Cara L. Mack, both of Medical College of Wisconsin.
- Remains **your indispensable source** for definitive, evidence-based answers on every aspect of pediatric care.
- **An eBook version is included with purchase.** The eBook allows you to access all of the text, figures, and references, with the ability to search, customize your content, make notes and highlights, and have content read aloud. Any additional digital ancillary content may publish up to 6 weeks following the publication date.

DESCRIPTION

Covering **every aspect of general pediatric practice**, as well as details for many pediatric subspecialists, *Nelson Textbook of Pediatrics, 22nd Edition*, brings you fully up to date with everything from rapidly changing diagnostic and treatment protocols to new technologies to the wide range of biologic, psychologic, and social problems faced by children today. Edited and written by experts and prominent members of the pediatric medical community, this comprehensive two-volume reference **covers both the science and art** of pediatric practice. It remains the **reference of choice** among pediatricians, pediatric residents, and others involved in the care of young patients, delivering the information you need in a concise, easy-to-use format for everyday reference and study.



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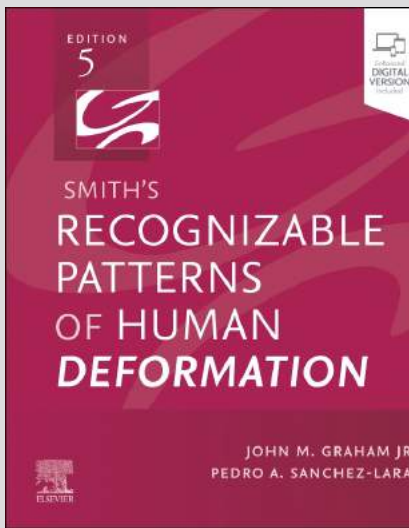
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Smith's Recognizable Patterns of Human Deformation, 5e

John M. Graham, Jr., MD, ScD, Director, Clinical Genetics and Dysmorphology, Director, Dysmorphology Program, Professor, Pediatrics, Cedars-Sinai and Harbor-UCLA Medical Center; **Pedro A. Sanchez-Lara, MD, MSCE**, Associate Professor of Clinical Pediatrics and Pathology, Keck School of Medicine, University of Southern California, Los Angeles, California; Medical Director of Molecular Cytogenomics & Craniofacial Genetics, Children's Hospital Los Angeles, Los Angeles, California and Research Instructor, Center for Craniofacial Molecular Biology, Herman Ostrow School of Dentistry, University of Southern California, Los Angeles, California

ISBN: 9780443114144
PREVIOUS ISBN: 9780323294942
PUB DATE: May 13, 2024
LIST PRICE: £80.99 / \$99.99 / €92.99
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.25w x 10.25h
PAGES: c. 400
AUDIENCE: Pediatrics, Family practice, Obstetrics, Neonatologists, NPs, PAs, medical students and residents; every clinician should have the Graham (and the Jones) texts. Physical therapists – Anyone needing information on practical management of common problems in otherwise normal newborns
BIC CODES: MJW
THEMA CLASSIFICATION: THEMAMKD

Highly readable and superbly illustrated—the definitive text on deformations in birth and childhood

KEY FEATURES

- Examines the initial clinical approach to suspected deformation problems, and then walks you through **pathogenesis, diagnostic features, management, prognosis, and counseling** for each condition.
- Addresses a full range of lower extremity deformations; joint dislocations; nerve palsies; chest and spinal deformations; head and neck deformations; craniosynostosis and cranial bone variations; problems associated with abnormal birth presentation, birth palsies, and procedure-related defects; infant head shape variations; and torticollis.
- Includes **new chapters** on early embryonic disruption and fetal disruption, **new Key Points** boxes throughout, **new insights and references** in every chapter, and a **new video** on the physical examination of a patient with a congenital radial nerve palsy.
- Distinguishes deformations from malformations for appropriate management.
- Utilizes four consistent sections in every chapter—Genesis, Features, Management and Prognosis, and Differential Diagnosis—to provide **concise yet comprehensive information on 50 common pediatric conditions**.
- Provides **evidence-based management recommendations** on common fetal complications such as oligohydramnios, pulmonary hypoplasia, and uterine structural abnormalities, and discusses current management techniques for each.

DESCRIPTION

The **only reference** devoted to the diagnoses and management of birth defects resulting from mechanical forces, *Smith's Recognizable Patterns of Human Deformation, 5th Edition*, provides **evidence-based management** for a range of common pediatric problems affecting the limbs and craniofacial region. Continuing the tradition of excellence established by Dr. Smith's research and teaching, this title supplies **highly readable, well-illustrated guidance** needed for timely intervention and effective treatment in order to avoid long-term adverse secondary consequences. It's an ideal resource offering comprehensive, systematic coverage for residents, pediatricians, practitioners, or parents seeking further information in this complex area.



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The Art and Science of Facelift Surgery, 2e

Edited by : **Joe Niamtu, DMD, FAACS**, Medical Director, Niamtu Cosmetic Facial Surgery, Diplomat, American Board of Cosmetic Facial Surgery, Diplomat, American Board of Oral and Maxillofacial Surgery, Associate Professor of Oral and Maxillofacial Surgery, Virginia Commonwealth University, Richmond, Virginia

ISBN: 9780443121364
PREVIOUS ISBN: 9780323613460
PUB DATE: May 10, 2024
LIST PRICE: £158.99 / \$219.99 / €184.99
DISCOUNT: Reference
FORMAT: Hardback
TRIM: 8.50w x 10.875h
PAGES: c. 246
AUDIENCE: Facial Plastics and Aesthetic Surgeons
BIC CODES: MNP
THEMA CLASSIFICATION: THEMAMNP

In-depth, cutting-edge coverage of facelift and facial rejuvenation surgery from a master in the field

KEY FEATURES

- Provides **authoritative advice, technical tips, and personal approaches** from Dr. Niamtu, a key opinion leader in cosmetic surgery, with contributions from other leading facelift surgeons.
- Covers the **contemporary procedures that today's patients are requesting**, including deep plane facelifts, submandibular gland resection, male facelifts, minimally invasive facelifts, chin implants, revision facelifts, and many more.
- Includes hundreds of **new clinical photos, new video content**, and updated procedural guidance, tips, and tricks throughout.
- Contains an abundance of **full-color photographs** that illustrate surgical steps and before-and-after outcomes, as well as **easy-to-follow instruction** for each procedure.
- Features **high-quality videos** such as diagnosis, patient selection, and surgical marking; deep plane face and neck lift; minimally invasive facelift; submentoplasty; all common SMAS approaches; facelift flap trimming; office setup and instrumentation; facelift complications; and more—showing all necessary and important stages of each surgery so you can learn directly from the surgeon as you watch each step being performed.
- Helps both trainee and practicing aesthetic surgeons **obtain optimal results and high patient satisfaction** with every facelift.
- **An eBook version is included with purchase.** The eBook allows you to access all of the text, figures, and references, with the ability to search, customize your content, make notes and highlights, and have content read aloud. Any additional digital ancillary content may publish up to 6 weeks following the publication date.

DESCRIPTION

Improved surgical techniques and increasing patient expectations have transformed the field of cosmetic facial surgery, and *The Art and Science of Facelift Surgery, 2nd Edition*, brings you up to speed with **today's best and latest procedures**. This highly practical resource features a **superbly illustrated print reference with step-by-step procedures** accompanied by **surgical videos of each technique**. Comprehensive, easy-to-follow instruction from internationally recognized expert Dr. Joe Niamtu III, with chapters by other internationally recognized colleagues, helps you achieve optimal outcomes on frequently requested procedures.



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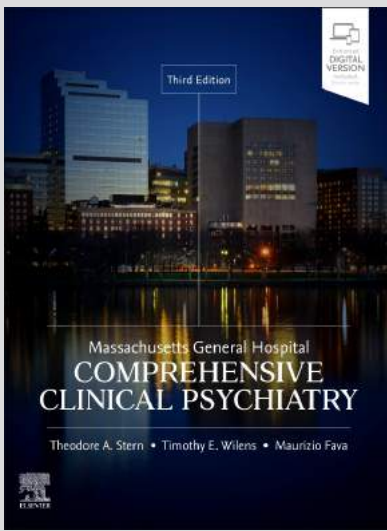


Speciality Medicine Plastic Surgery
<https://virtuale.elsevier.com>, www.elsevier.com

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Massachusetts General Hospital Comprehensive Clinical Psychiatry, 3e

Edited by : **Theodore A. Stern**, MD, Ned H. Cassem Professor of Psychiatry in the field of Psychosomatic Medicine/Consultation at Harvard Medical School; Chief Emeritus of The Avery D. Weisman, Psychiatry Consultation Service; and Director of the Thomas P. Hackett Center for Scholarship in Psychosomatic Medicine at the Massachusetts General Hospital; **Timothy E. Wilens**, MD, Chief of the Division of Child and Adolescent Psychiatry and Co-director of the Center for Addiction Medicine; Massachusetts General Hospital (MGH); MGH Trustees Chair in Addiction Medicine and Professor of Psychiatry, Harvard Medical School

ISBN: 9780443118449

PREVIOUS ISBN: 9780323295079

PUB DATE: May 24, 2024

LIST PRICE: £201.99 / \$249.99 /

€231.99

DISCOUNT: Reference

FORMAT: Hardback

TRIM: 8.50w x 10.875h

PAGES: c. 1034

AUDIENCE: Practicing psychiatrists

BIC CODES: MMH

THEMA CLASSIFICATION:

THEMAMKL

The information you need about psychiatric care from the hospital you trust

KEY FEATURES

- Uses a **reader-friendly and highly templated format** with abundant boxed summaries, bulleted points, case histories, algorithms, references, and suggested readings.
- Contains **new chapters** on the Psychiatric Management of Patients with Cardiac, Renal, Pulmonary, and Gastrointestinal Disease; COVID-19 Infection; Burns, Trauma, and Intensive Care Unit Treatment; Care of LGBTQ Patients; and Mindfulness and Resilience.
- **Covers key areas**, such as Substance Use Disorders; Mood, Anxiety, and Psychotic Disorders; Emergency Psychiatry; Functional Neuroanatomy and the Neurologic Examination; Psychological and Neuropsychological Assessment; Military Psychiatry; Psychiatric Manifestations of Traumatic Brain Injury; Legal and Ethical Issues in Psychiatry; End of Life Care; and Approaches to Collaborative Care and Primary Care Psychiatry.
- Features key points for every chapter, **updated DSM-5 criteria**, and **enhanced content** on collaborative care and behavioral medicine, ensuring that your knowledge is thorough and up to date.
- Corresponds to the companion review volume, *Massachusetts General Hospital Study Guide for Psychiatry Exams, 2nd Edition* (ISBN: 978-0-443-11983-5).
- **An eBook version is included with purchase.** The eBook allows you to access all of the text, figures, and references, with the ability to search, customize your content, make notes and highlights, and have content read aloud. Any additional digital ancillary content may publish up to 6 weeks following the publication date.

DESCRIPTION

The Massachusetts General Hospital is widely regarded as one of the world's premier psychiatric institutions. *Massachusetts General Hospital Comprehensive Clinical Psychiatry, 3rd Edition*, offers **practical, informative, and hands-on advice** from the staff of the esteemed MGH Department of Psychiatry, helping you put today's best practices to work for your patients. This authoritative reference covers a **wide variety of clinical syndromes and settings**, aided by superb graphics throughout. In one convenient volume, you'll have **easy access to the answers you need** to face and overcome any clinical challenge.



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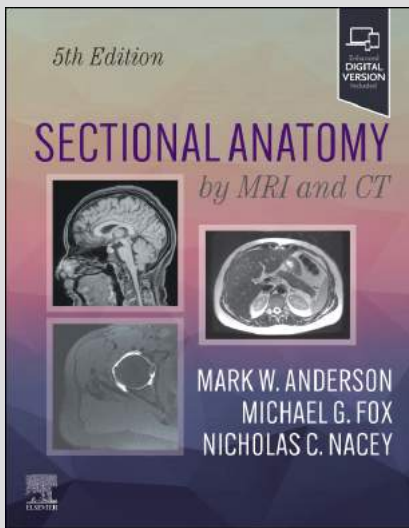
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Sectional Anatomy by MRI and CT, 5e

Edited by : **Mark W. Anderson**, MD, Harrison Distinguished Teaching Professor of Radiology; Chief, Musculoskeletal Imaging, Professor of Orthopaedic Surgery, University of Virginia, Charlottesville, Virginia; **Michael G Fox**, MD, Associate Professor of Radiology, Department of Radiology, Mayo Clinic College of Medicine, Phoenix, Arizona and **Nicholas C. Nacey**, MD, MSK Radiologist, University of Virginia School of Medicine, Radiology and Medical Imaging, Charlottesville, Virginia

ISBN: 9780323934480
PREVIOUS ISBN: 9780323394192
PUB DATE: May 13, 2024
LIST PRICE: £270.99 / \$346.99 / €303.99
DISCOUNT: Reference
FORMAT: Hardback
TRIM: 8.50w x 10.875h
PAGES: c. 605
AUDIENCE: Radiologists, fellows, and residents
BIC CODES: MMPH, MMPG
THEMA CLASSIFICATION: THEMAMKSH; THEMAMKT

State-of-the-art cross-sectional anatomy in a highly relevant, easily accessible atlas format

KEY FEATURES

- Features **color-coded labels** for nerves, vessels, muscles, bone tendons, and ligaments that facilitate accurate identification of key anatomic structures.
- Provides **new on/off labels in the accompanying eBook**, as well as **scroll and zoom capabilities** on photos for convenient access during interpretation sessions and real-time resident education.
- Presents **carefully labeled MRIs for all body parts**, as well as schematic diagrams and concise statements, to clarify correlations between bones and tissues.
- Includes **CT scans for selected body parts** to enhance anatomic visualization.
- Features **1165 state-of-the-art images** that can be viewed in three standard planes: axial, coronal, and sagittal.
- **An eBook version is included with purchase.** The eBook allows you to access all of the text, figures, and references, with the ability to search, customize your content, make notes and highlights, and have content read aloud. Any additional digital ancillary content may publish up to 6 weeks following the publication date.

DESCRIPTION

A sure grasp of cross-sectional anatomy is essential for accurate radiologic interpretation, and *Sectional Anatomy by MRI and CT, 5th Edition*, provides exactly the information needed in a **highly illustrated, quick-reference** format. **New coverage of the cervical spine, brain, and thumb**, as well as new on/off labels in the eBook version make this title an essential diagnostic tool for both residents and practicing radiologists.



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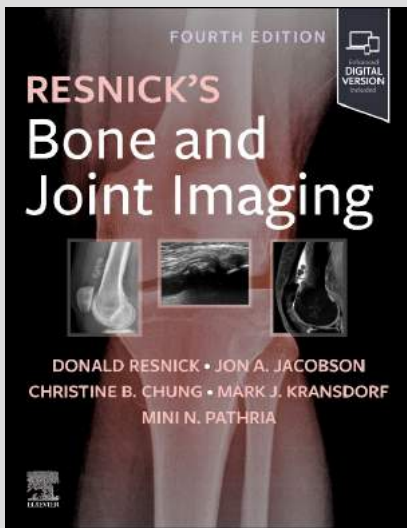


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Resnick's Bone and Joint Imaging, 4e

Donald L. Resnick, MD, Professor Emeritus of Radiology, Former Chief, Musculoskeletal Imaging, University of California, San Diego; **Jon A. Jacobson**, MD, Professor of Radiology, Lenox Hill Radiology, New York, NY; **Christine B. Chung**, MD, Professor of Radiology, Director, Musculoskeletal Imaging Research, University of California, San Diego, La Jolla, California; **Mark J. Kransdorf**, MD, Professor of Radiology, Mayo Clinic College of Medicine and Science, Scottsdale, Arizona and **Mini N. Pathria**, Professor of Clinical Radiology, University of California, San Diego, San Diego, California

ISBN: 9780323523271

PREVIOUS ISBN: 9780721602707

PUB DATE: May 20, 2024

LIST PRICE: £270.99 / \$335.99 / €317.99

DISCOUNT: Reference

FORMAT: Hardback

TRIM: 8.50w x 10.875h

PAGES: c. 1252

ILLUSTRATIONS: 3270 illustrations (20 in full color)

AUDIENCE: Radiology residents, fellows

BIC CODES: MMPH

THEMA CLASSIFICATION: THEMAMKSH

Concise, authoritative guidance from leading experts in musculoskeletal imaging

KEY FEATURES

- Features a newly revised, streamlined organization with easy-to-digest sections on infection; trauma; osteoarticular, nerve, and muscle derangements; arthropathy; systemic diseases (metabolic, endocrine, hematologic, and connective tissue); tumors; interventional radiology; post-operative radiology; and pediatric imaging.
- Provides more than 2,100 outstanding images (1,300 are new) that depict important concepts, techniques, and findings in musculoskeletal imaging.
- Discusses the full range of diagnostic modalities, including advanced imaging methods and techniques and expanded content on MRI and ultrasound.
- Covers key introductory material on basic science, diagnostic techniques, imaging, and interventional procedures.
- A highly efficient review source for residency and radiology board examinations, as well as an indispensable reference for clinical practice.
- An eBook version is included with purchase. The eBook allows you to access all of the text, figures and references, with the ability to search, customize your content, make notes and highlights, and have content read aloud. Any additional digital ancillary content may publish up to 6 weeks following the publication date.

DESCRIPTION

Distilling all of the most important content from Dr. Donald L. Resnick's highly esteemed, five-volume Diagnosis of Bone and Joint Disorders into a single, concise source, Bone and Joint Imaging, 4th Edition focuses on the specific, state-of-the-art musculoskeletal imaging and interpretation knowledge practitioners need today. This highly anticipated new edition has been fully revised from cover to cover for a remarkably thorough, yet focused and pragmatic, source of clinical guidance. Dr. Resnick's carefully chosen editorial team, Drs. Jon A. Jacobson, Christine B. Chung, Mini N. Pathria (all former Resnick fellows) and Mark J. Kransdorf (co-author of the previous edition), are well-equipped to expertly address the many recent changes in musculoskeletal radiology since the previous edition. Authoritative, easy-to-read text and more than 3,800 exquisite images demonstrate every principle and capture the characteristic presentation of the wide range of disorders you're most likely to encounter in everyday practice.



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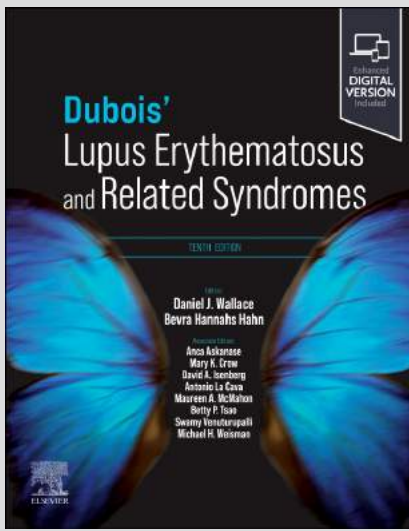
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Dubois' Lupus Erythematosus and Related Syndromes, 10e

Edited by : **Daniel J. Wallace**, MD, FAAP, FACR, Medical Director, Wallace Rheumatic Study Center; Attending Physician, Cedars-Sinai Medical Center; Clinical Professor of Medicine, David Geffen School of Medicine at UCLA, Los Angeles, California and **Bevra Hahn**, MD, Professor of Medicine, Chief, Division of Rheumatology, David Geffen School of Medicine at UCLA, Los Angeles, California

ISBN: 9780323932325
PREVIOUS ISBN: 9780323479271
PUB DATE: May 03, 2024
LIST PRICE: £169.99 / \$209.99 / €198.99
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 8.50w x 10.875h
PAGES: c. 796
AUDIENCE: Rheumatologists in training and in practice
BIC CODES: MJM
THEMA CLASSIFICATION: THEMAMJM

Benefit from a wealth of expertise and trusted knowledge in this challenging field

KEY FEATURES

- Provides **complete clinical coverage of every aspect of cutaneous and systemic lupus erythematosus**, including definitions, pathogenesis, autoantibodies, clinical and laboratory features, management, prognosis, and patient education.
- Includes **significant new content throughout**: a new chapter on the endocrine system and hormones; newly distinct chapters on the heart and lung; new content on social disparities in lupus, clinical presentation of nephritis, and pulmonary hypertension; a new concluding chapter on future directions in the field; new basic science coverage of the microbiome, autoinflammatory, and monogenic lupus; and new coverage of diversity, inclusion, gender, compliance, and adherence.
- Offers a fresh perspective from **two new associate editors and many new authors** with representation from 30 countries.
- Contains an up-to-date overview of significant advances in **cellular, molecular, and genetic technologies**, including genetic advancements in identifying at-risk patients.
- Discusses the **clinical management of related disorders** such as Sjogren's syndrome, scleroderma, polymyositis, and antiphospholipid syndrome (APS).
- Presents the knowledge and expertise of international contributors to provide **new global perspectives** on manifestations, diagnosis, and treatment.

DESCRIPTION

For more than 50 years, *Dubois' Lupus Erythematosus and Related Syndromes* has been recognized internationally as **the go-to clinical reference on lupus and other connective tissue diseases**. From basic scientific principles to practical points of clinical management, the 10th edition provides **extensive, authoritative coverage** of systemic lupus erythematosus (SLE) and its related diseases in a **logical, clearly written, user-friendly** manner. It's an ideal resource for rheumatologists and internal medicine practitioners who need a comprehensive clinical reference on all aspects of SLE, connective tissue diseases, and the antiphospholipid syndromes.



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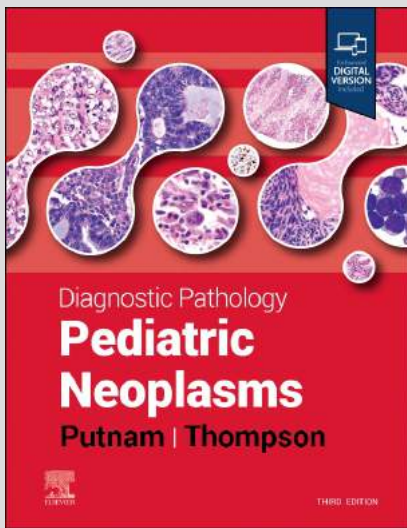


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Diagnostic Pathology: Pediatric Neoplasms, 3e

Angelica R. Putnam, MD, Associate Professor of Pathology, University of Utah School of Medicine, Division of Pediatric Pathology, Primary Children's Hospital, Salt Lake City, Utah and
Karen S. Thompson, MD, Professor and Chair, Department of Pathology, John A. Burns School of Medicine, University of Hawaii, Pan Pacific Pathologists, Clinical Laboratories of Hawaii, Kapiolani Medical Center for Women and Children, Honolulu, Hawaii

ISBN: 9780443224263
PREVIOUS ISBN: 9780323548069
PUB DATE: May 16, 2024
LIST PRICE: £266.99 / \$329.99 / €311.99
DISCOUNT: Reference
FORMAT: Hardback
TRIM: 8.50w x 10.875h
PAGES: c. 898
ILLUSTRATIONS: Approx. 2958 illustrations (2958 in full color)
AUDIENCE: Pediatric pathologists at all levels of experience
BIC CODES: MMF
THEMA CLASSIFICATION: THEMAMKF

Expert, up-to-date coverage of pediatric neoplasms in a visually stunning, easy-to-read format

A Volume in the *Diagnostic Pathology Series*

KEY FEATURES

- Covers all areas of pediatric tumor pathology, with details on more than 270 of the most frequently encountered benign and malignant neoplastic entities, including rare but important edge cases
- Addresses each organ system in the body (including skin), as well as soft tissue, bones, and joints, with an overall focus on benign, borderline, and malignant infectious, congenital, and genetic conditions
- Includes new chapters on Intramuscular Fast-Flow Anomaly, Kaposiform Lymphangiomatosis, Lipofibromatosis, Pediatric Hepatocellular Carcinoma, Renal Metanephric Tumors, Choriocarcinoma, and more
- Contains significantly updated information throughout, including new content, images, and references
- Features an intuitive chapter layout designed to help identify crucial elements of each diagnosis, along with associated differential diagnoses and pitfalls, to resolve problems more quickly during routine sign-out of cases
- Details the increasing use of molecular diagnostics in pediatric tumor pathology
- Features more than 2,600 images, including histology and gross pathology images, full-color medical illustrations, clinical photographs, and radiology images to help practicing and in-training pathologists reach a confident diagnosis

DESCRIPTION

This expert volume in the Diagnostic Pathology series is an excellent point-of-care resource for practitioners at all levels of experience and training. Covering all aspects of pediatric neoplasms, including recent molecular advances in the field, this volume incorporates the most up-to-date scientific and technical knowledge to provide a comprehensive overview of all key issues relevant to today's practice. Richly illustrated and easy to use, the third edition of Diagnostic Pathology: Pediatric Neoplasms is a visually stunning, one-stop resource for every practicing pathologist, resident, student, or fellow as an ideal day-to-day reference or as a reliable training resource.



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Bio-inoculants in Horticultural Crops

Advances in Bio-inoculant Sciences, Volume 3

Edited by : **Amitava Rakshit**, Faculty Member, Department of Soil Science and Agricultural Chemistry, Institute of Agricultural Sciences, Banaras Hindu University, India; **Vijay Singh Meena**, Project Coordinator, IBorlaug Institute for South Asia (BISA)-CIMMYT, Pusa, Samastipur, Bihar, India; **Leonardo Fernandes Fraceto**, PhD, Associate Professor, Institute of Science and Technology, Sao Paulo State University (UNESP), Sao Paulo, Brazil; **Manoj Parihar**, Scientist, Crop Production Division, ICAR-Vivekananda Parvatiya Krishi Anusandhan Sansthan, Uttarakhand, India; **Adalberto Benavides-Mendoza**, Department de Horticultura, Universidad Autonoma, Calzada Antonio Narro, Saltillo, Mexico and **H.B. Singh**, Professor and Ex Head, Department of Mycology and Plant Pathology, Institute of Agricultural Sciences, Varanasi, India



ISBN: 9780323960052
PUB DATE: May 01, 2024
LIST PRICE: £155.00 / \$200.00 /
€175.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 395

AUDIENCE: Researchers, academics and advanced level students in sustainable horticultural and agricultural sciences, and plant microbiology

BIC CODES: TVK, PSG, TVS, PSB

THEMA CLASSIFICATION:

THEMAPSG; THEMATVK;

THEMAPST; THEMATVS;

THEMAPSB

Explores real-world applications of novel microbes through comprehensive information on various biological approaches

KEY FEATURES

- Provides microbial tools and techniques for the sustainable production of horticulture crops under various production systems
- Explains the action mechanism and application methodology of microbial inoculants and their interaction with plants
- Identifies future avenues for research and developments
- Includes extensive illustrations

DESCRIPTION

Bio-inoculants in Horticultural Crops, Volume Three in the *Advances in Bio-inoculant Sciences* series, focuses on real-time application of novel microbes that have been proven to enhance and improve plant health and productivity. The book provides comprehensive information on a range of biological approaches and mechanisms for the improvement of horticultural crops being practiced in different production systems. Covering the subject from historical developments to recent advances in microbial interventions, it addresses the potential role and bio-mechanism of bio-inoculants for challenges including stress tolerance, production, commercialization, application methodology, challenges and future roadmap for sustainable production system of horticultural crops.

This volume will be useful to scientists, academicians, and students of horticulture, agriculture microbiology, plant protection, and other related subjects.



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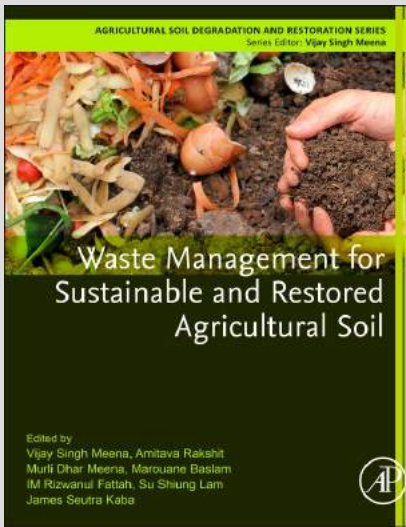


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Waste Management for Sustainable and Restored Agricultural Soil



Edited by : **Vijay Singh Meena**, Project Coordinator, IBorlaug Institute for South Asia (BISA)-CIMMYT, Pusa, Samastipur, Bihar, India; **Amitava Rakshit**, Faculty Member, Department of Soil Science and Agricultural Chemistry, Institute of Agricultural Sciences, Banaras Hindu University, India; **Murli Dhar Meena**, Scientist, ICAR-Directorate of Rapeseed-Mustard Research, Sewar, Bharatpur, Rajasthan, India; **Marouane Baslam**, Assistant Professor Faculty of Agriculture - Niigata University Ikarashi, Nishi-ku, Niigata, Japan; **IM Rizwanul Fattah**, Postdoctoral Fellow, School of ISM, Faculty of Engineering and IT, University of Technology Sydney, Sydney, Australia; **Su Shiung Lam**, Professor, Institute of Tropical Aquaculture & Fisheries (AKUATROP) of UMT, Higher Institution Centre of Excellence (HICoE) for Future Food, Malaysia and **James Seutra Kaba**, Agronomist and Agroforestry Scientist College of Agriculture and Natural Resources, Kwame Nkrumah University of Science and Technology (KNUST) Ghana

ISBN: 9780443184864
PUB DATE: May 01, 2024
LIST PRICE: £165.00 / \$200.00 / €190.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 428

AUDIENCE: Undergraduate and postgraduate students, researchers, and academics in fields related to natural resources management, agricultural sciences, and environmental sciences

BIC CODES: TV, RN, TVK, PSAF, RBGB

THEMA CLASSIFICATION:

THEMATQ; THEMATV;

THEMAPSAF; THEMATVK;

THEMATVB; THEMARBGB

Provides insight on sustainable waste management for the restoration of degraded agricultural ecosystems

KEY FEATURES

- Focuses on understanding basic and applied aspects of waste management for sustainable agriculture and how nutrients may be made available through waste
- Presents a broad overview of the wastes generated and their sustainable management for restoration of soil health
- Highlights waste characteristics and nutrient releasing patterns during decomposition of waste

DESCRIPTION

Waste Management for Sustainable and Restored Agricultural Soil provides a holistic approach to various mechanisms of waste management for plant nutrients, highlighting the importance of improving plant growth, nutrient concentration, and system sustainability for enhancing crop production and achieving desired environmental goals. Covering a broad overview of different kinds of wastes and waste recycling methods and sustainable management for soil health, this book focuses on both basic and applied aspects of waste management for sustainable agriculture and how nutrients are made available through waste.

Academics, professionals, researchers and policymakers working in the fields of safe waste management for potential use in agricultural crop production will benefit from this book.



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Wengang Zhang
Yanmei Zhang
Runhong Zhang
Yongqin Li
Li Hong

Design of Deep Braced Excavation in Urban Geotechnical Environments



Design of Deep Braced Excavation in Urban Geotechnical Environments

Wengang Zhang, Full Professor, School of Civil Engineering, Chongqing University, China; **Yanmei Zhang**, Associate Professor, Chongqing University, China; **Runhong Zhang**, Chongqing University, China; **Yongqin Li**, Chongqing University, China; **Li Hong**, Chongqing University, China and **Yuntao Yuan**

ISBN: 9780443138829
PUB DATE: May 01, 2024
LIST PRICE: £142.00 / \$185.00 /
€165.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 716

AUDIENCE: Geotechnical design engineers and researchers in geotechnical engineering, geological engineering, or civil engineering. Engineers working in infrastructure sectors

BIC CODES: RBG

THEMA CLASSIFICATION:

THEMARBG

Valuable reference on both theory and practical application in understanding deep braced excavation in urban environments

KEY FEATURES

- Presents the latest theory and knowledge surrounding deep braced excavations
- Systematically outlines theory, field reports, calculations, and back analysis, making it much easier to master the work relevant with deep braced excavations
- Provides detailed visual elements and hyperlinks to additional images and video for case excavations to enhance understanding

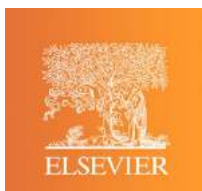
DESCRIPTION

Design of Deep Braced Excavation in Urban Geotechnical Environments presents the design and calculation of deep braced excavation in urban geotechnical environments, considering the soil characteristics of spatial variability and anisotropy, as well as excavation responses of urban adjacent utilities such as pipelines, tunnels, foundation piles, and buildings. The text begins with coverage of overall stability, earth pressure and strut force, retaining wall responses, and ground movements. Numerical modeling and computer codes are also outlined in detail. Final chapters conclude with an examination of the determination of excavation responses of urban adjacent utilities and failure analysis based on several case histories.

This book will be ideal for those that need the latest knowledge in both theory and practical application for deep excavation problems.



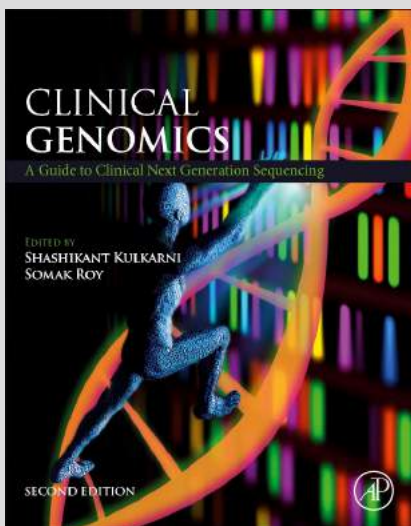
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Clinical Genomics, 2e

A Guide to Clinical Next Generation Sequencing

Edited by : **Shashikant Kulkarni**, Head of Clinical Genomics, Genomics and Pathology Services; Director of Cytogenomics and Molecular Pathology, Washington University School of Medicine, USA; **Somak Roy**, Assistant Professor, Division of Molecular and Genomic Pathology, University of Pittsburgh Medical Center, Pittsburgh, PA, USA and Director of Molecular Informatics and the Director of the MGP Fellowship Program, and Associate Laboratory Director of the Division of Molecular and Genomic Pathology

ISBN: 9780323900249
PREVIOUS ISBN: 9780124047488
PUB DATE: Sep 01, 2024
LIST PRICE: £162.99 / \$200.00 /
€186.99

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 8.25w x 11.00h

PAGES: c. 523

AUDIENCE: Clinical Genomicists, Molecular Pathologists, Molecular Geneticists, Clinical Cytogeneticists, Clinical Geneticists, Primary Care Physicians (including Oncologists, Pediatricians, Neurologists, Cardiologists, and Neonatologists), and Genetic Counselors, Bioinformaticians, clinical informaticians, software developers involved with supporting clinical molecular laboratories, molecular laboratory technologists, and molecular pathology/molecular genetics trainees

BIC CODES: PSAK, MFN

THEMA CLASSIFICATION:
THEMAPSAK; THEMAMFN

Reviews high throughput genomic sequencing for diagnosis, prognosis and precision management of inherited and somatic disorders, enabling genomic medicine

KEY FEATURES

- Simplifies the complexities of NGS technologies for rapid education of clinical genomicists and genomic pathologists
- Instructs in tested practice-based analysis for precision diagnosis and treatment plans, as well as pipelines and meta-analysis for a full range of clinically important variants
- Provides technical consideration for the validation and implementation of bioinformatics pipelines and related resources in the clinical molecular laboratory
- Addresses novel sequencing technologies, including long-read sequencing for detecting structural variants and haplotypes
- Covers cloud computing and Modern IT infrastructure (data storage, security, analytics) for scalable and secure genomics medicine

DESCRIPTION

Clinical Genomics: A Guide to Clinical Next Generation Sequencing, Second Edition provides a full overview of next-generation sequencing (NGS) technologies that are currently used in clinical diagnostic laboratories. The book presents key bioinformatic challenges and solutions that must be addressed by clinical genomicists and genomic pathologists, such as specific pipelines for identification of the full range of variants that are clinically important. It focuses on the challenges of diagnostic interpretation of NGS results in a clinical setting, with later sections devoted to emerging regulatory issues governing the clinical use of NGS and reimbursement paradigms that will affect the way in which laboratory professionals get compensated for testing. Following the wide use of the current edition by clinicians and researchers alike, this fully revised, new edition addresses the evolving landscape of genomics medicine, along with recent advances in our understanding of molecular mechanisms of human diseases and developmental biology. In addition, the book updates on sequencing chemistry and platforms, bioinformatics algorithms, clinical informatics, IT infrastructure and emerging applications of artificial intelligence in genomics.



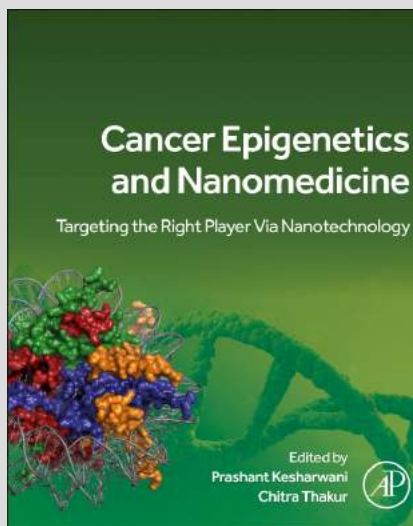
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Cancer Epigenetics and Nanomedicine

Targeting the Right Player via Nanotechnology

Edited by : **Prashant Kesharwani**, PhD, Assistant Professor, Department of Pharmaceutics, School of Pharmaceutical Education and Research, Jamia Hamdard, New Delhi, India and **Chitra Thakur**, PhD, Research Assistant Professor, Stony Brook Cancer Center, Stony Brook University, New York, United States of America

ISBN: 9780443132094
PUB DATE: Aug 20, 2024
LIST PRICE: £138.00 / \$180.00 / €160.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 511
AUDIENCE: Researchers and graduate students in cancer research
Oncologists, medical doctors, researchers, and graduate students in nanotechnology
BIC CODES: UFL, MBF
THEMA CLASSIFICATION: THEMAKJT; THEMAUFL

Explores wide applications of epigenetic research in the management of human cancers using the latest advancement in nanomedicine research

KEY FEATURES

- Delivers a detailed and a complete journey of how cancer develops, its genetics as well as other internal and external factors that are contributors of carcinogenesis.
- Provides an in-depth knowledge on epigenetics and the various epigenetic biomolecules, enzymes and other signaling pathways that are the promising entities for drug discovery and chemotherapeutics.
- Presents state-of-the-art information on the next generation cancer therapies, challenges, and future of the field.

DESCRIPTION

Cancer Epigenetics and Nanomedicine: Targeting the Right Player via Nanotechnology is a complete package that provides a comprehensive and thorough understanding of the key players that modulate the various steps of carcinogenesis and malignant progression of the disease and the critical targets to be exploited for developing novel modalities of diagnosis and therapeutics.

Since epigenetic aberrations can be potentially reversed and restored to their normal state through epigenetic therapy, the book also discusses the challenges and the future of the field with the cutting-edge revelations and limitations that this research endeavor can offer, thereby helping the readers to enhance their critical thinking and adopt strategies of therapeutic importance.



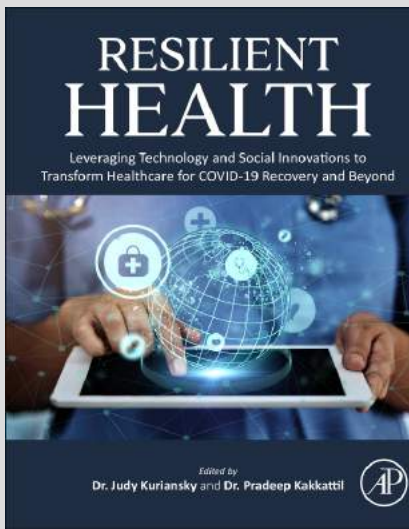
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Resilient Health

Leveraging Technology and Social Innovations to Transform Healthcare for COVID-19 Recovery and Beyond

Edited by : **Judy Kuriansky**, International Clinical Psychologist, Faculty of Columbia University Teachers College, USA and Visiting Professor, Peking Health Sciences Center and **Pradeep Kakkattil**, Director, Office of Innovation, Joint United Nations Programme on HIV/AIDS (UNAIDS)

ISBN: 9780443185298
PUB DATE: May 23, 2024
LIST PRICE: £115.00 / \$150.00 / €131.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 1135

AUDIENCE: All stakeholders in health and related field and public and private sectors including programmers, policymakers, practitioners, innovators, government, graduate students, educators and researchers.

BIC CODES: MBF

THEMA CLASSIFICATION: THEMAPSAX

Offers the latest knowledge and real-world examples of health innovations worldwide

KEY FEATURES

- Addresses the “hot” topic today in the ever-emerging landscape of disruptive digital healthcare delivery, covering critical issues and solutions in digital health, big data, and artificial intelligence as well as benefits and challenges, and ethical concerns
- Provides case examples of transformative and radical solutions to urgent health needs, especially in remote low-resource settings as well as in less well-covered regions of Central and South America and MENA (Middle East and North Africa)
- Positions health innovations at the nexus of the global framework of Universal Health Coverage and of the United Nations Sustainable Developing Goals to achieve SDG3 - good health and well-being –at the intersection with climate action, gender equality, quality education, eradication of poverty and hunger, sustainable cities, environmental protection and others.
- Serves as an exceptional resource, reference, teaching tool, and guide for all stakeholders including civil society and NGOs, government, think tanks, investors, academia, researchers and practitioners, product developers and all policymakers and programmers involved in planning and delivering healthcare, including an extensive section of resources in the digital health space in various categories like publications, conferences, and collaboratives.
- Provides examples of, and encourages, multi-stakeholder partnerships essential to re-imagine health systems, delivery and access, and to achieve intended healthcare objectives

DESCRIPTION

Resilient Health: Leveraging Technology and Social Innovations to Transform Healthcare for COVID-19 Recovery and Beyond presents game-changing and disruptive technological innovations and social applications in physical and mental healthcare around the world for the post-COVID age and beyond, addressing the urgent need for care. In this first-of-its kind comprehensive volume, experts and stakeholders from all sectors - government and the public and private sectors - offer models and frameworks for policy, programming, and financing to transform healthcare, address inequities, close the treatment gap, and “build back better,” especially for under-resourced vulnerable communities globally, to “leave no one behind” and advance development globally.



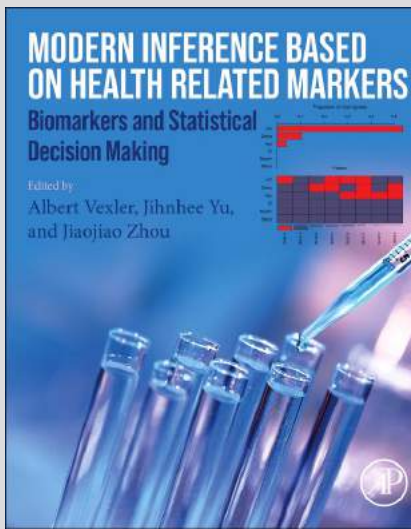
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Modern Inference Based on Health-Related Markers

Biomarkers and Statistical Decision Making

Edited by : **Albert Vexler**, PhD Professor, The State University of New York at Buffalo, Department of Biostatistics, USA; **Jihnee Yu**, PhD Associate Professor, The State University of New York at Buffalo, Department of Biostatistics, USA and **Jiaojiao Zhou**, PhD., SUNY Distinguished Professor, Dept. of Biostatistics, SPHHP, Assistant Director, IHI at University, USA

ISBN: 9780128152478
PUB DATE: May 01, 2024
LIST PRICE: £119.00 / \$150.00 / €138.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 408
AUDIENCE: Biostatisticians, epidemiologists, practitioners
BIC CODES: MBNH, KNDH1
THEMA CLASSIFICATION: THEMAMF; THEMATCB

A compendium of biomarkers based methodologies for respective health related fields and health related marker-specific biostatistical techniques

KEY FEATURES

- Combines modern epidemiological and public health discoveries with cutting-edge biostatistical tools, including relevant software codes, offering one full package to meet the demand of practical investigators
- Includes the emerging topics from real health fields in order to display recent advances and trends in Biomarkers and associated Decision Making areas
- Written by researchers who are leaders of Epidemiological and Biostatistical fields, presenting up-to-date investigations related to the measuring health issues, emerging fields of biomarkers, designing health studies and their implementations, clinical trials and their practices and applications, different aspects of genetic markers

DESCRIPTION

Modern Inference Based on Health Related Markers: Biomarkers and Statistical Decision Making provides a compendium of biomarkers based methodologies for respective health related fields and health related marker-specific biostatistical techniques. The book introduces correct and efficient testing mechanisms, including procedures based on bootstrap and permutation methods with the aim of making these techniques assessable to practical researchers. In the biostatistical aspect, it describes how to correctly state testing problems, but it also includes novel results, which have appeared in current statistical publications.

In addition, the book discusses also modern applied statistical developments that consider data-driven techniques, including empirical likelihood methods and other simple and efficient methods to derive statistical tools for use in health related studies.



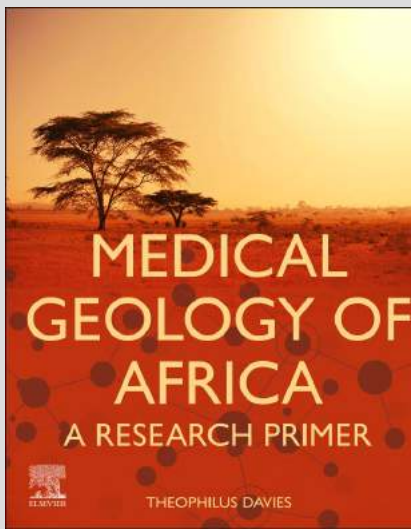
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Medical Geology of Africa: A Research Primer

Theophilus Clavell Davies, Visiting Professor of Medical Geology, University of Nigeria at Nsukka, Nigeria

ISBN: 9780128187487
PUB DATE: May 01, 2024
LIST PRICE: £127.00 / \$165.00 / €144.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 651

AUDIENCE: Researchers, practitioners, senior undergraduates and postgraduates of Earth Sciences, Geoecology, Environmental and Public Health, and Medicine

BIC CODES: RBG, PSA

THEMA CLASSIFICATION: THEMARBG; THEMAPS

A comprehensive guide to geological materials, processes and the health of humans and animals, with specific relevance to Africa

KEY FEATURES

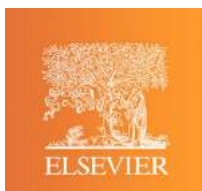
- Provides a suggested interdisciplinary curriculum for departments interested in designing a medical geology program
- Includes more than 250 full-color illustrations and photographs
- Features extended inquiry-based investigations and examples that employ real geochemical datasets, epidemiological records, public health statistics and visualizations

DESCRIPTION

Medical Geology of Africa explores the connection between geological materials, processes and the health of humans and animals. The book fosters an improved understanding of the ways in which the geological environment impacts the geographical distribution of health problems and how they contribute to better diagnoses and therapy. Africa's unique geoenvironmental condition gives added relevance to such studies, underlining the need for geoscience and public health students and practitioners to understand new principles and applications. Chapters in the book provide extended enquiry-based investigations and examples that employ real geochemical datasets, epidemiological records, public health statistics and visualizations.



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Transpathology

Molecular Imaging-Based Pathology

Edited by : **Mei Tian**, President-elect of the World Molecular Imaging Society (WMIS), Director of Medical Imaging and Nuclear Medicine Program of Zhejiang University, the Vice President of Zhejiang University Medical Center, the Vice President of Hangzhou Riverside Hospital of Zhejiang University School of Medicine.

ISBN: 9780323952231
PUB DATE: May 01, 2024
LIST PRICE: £127.00 / \$165.00 / €144.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 298

AUDIENCE: Professionals in the fields of pathology, molecular imaging, nuclear medicine, radiology, Medical students, clinical residents, postgraduate students who should aware of the importance of non-invasive diagnosis-based precision medicine and future medicine

BIC CODES: PSA

THEMA CLASSIFICATION:
THEMAPS

Helps readers understand the current development and future direction of transpathology, molecular imaging-based pathology

KEY FEATURES

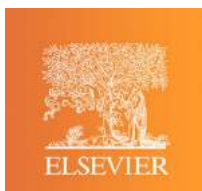
- Introduces a new concept of molecular imaging-guided precise biopsy
- Links in vivo and ex vivo information at various scales by using multi-modality imaging technologies
- Integrates future technologies for the non-invasive cross-validation of underlying mechanisms

DESCRIPTION

Transpathology: Molecular Imaging-Based Pathology is a multidisciplinary reference on molecular imaging and pathology. The book is intended for professionals in the fields of molecular imaging, nuclear medicine, radiology, and pathology as well as students and clinical residents. The book describes the importance of non-invasive diagnosis-based precision medicine and presents a detailed description of current transpathological approaches in different aspects essential for the future development of precision medicine. It's molecular imaging approach to experimental research and clinical practice will drive the field forward and improve research outcomes.



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Application of Artificial Intelligence in Early Detection of Lung Cancer

Amlan Chakrabarti, Full Professor and Director, A.K.Choudhury School of Information Technology, University of Calcutta, India; **Madhuchanda Kar**, Clinical Director of Department of Oncology, Peerless Hospital Kolkata, India; **Jhilam Mukherjee**, Senior Research Fellow, Centre of Excellence in Systems Biology and Biomedical Engineering, University of Calcutta, India and **Sayan Das**, Radiation Oncologist and Associate Consultant, Department of Interventional Radiology and Imaging, Peerless Hospital Kolkata, India

ISBN: 9780323952453
PUB DATE: May 01, 2024
LIST PRICE: £127.00 / \$165.00 / €144.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 418
AUDIENCE: Researchers and graduate students on cancer research, oncologists, Clinical researchers, radiologists
BIC CODES: UFL, MBF
THEMA CLASSIFICATION: THEMAKJT; THEMAUFL

Presents cutting-edge artificial intelligence techniques to predict and diagnose lung cancer

KEY FEATURES

- Provides an overview of the latest developments of artificial intelligence technologies applied to the detection of pulmonary nodules
- Discusses the different technologies available and guides readers step-by-step to the most applicable one for the specific lung cancer type
- Describes the entire study design on prediction of lung cancer to help readers apply it to their research successfully

DESCRIPTION

Application of Artificial Intelligence in Early Detection of Lung Cancer presents the most up-to-date computer-aided diagnosis techniques used to effectively predict and diagnose lung cancer. The presence of pulmonary nodules on lung parenchyma is often considered an early sign of lung cancer, thus using machine and deep learning technologies to identify them is key to improve patients' outcome and decrease the lethal rate of such disease. The book discusses topics such as basics of lung cancer imaging, pattern recognition techniques, deep learning, and nodule detection and localization. In addition, the book discusses risk prediction based on radiological analysis and 3D modeling.

This is a valuable resource for cancer researchers, oncologists, graduate students, radiologists, and members of biomedical field who are interested in the potential of AI technologies in the diagnosis of lung cancer.



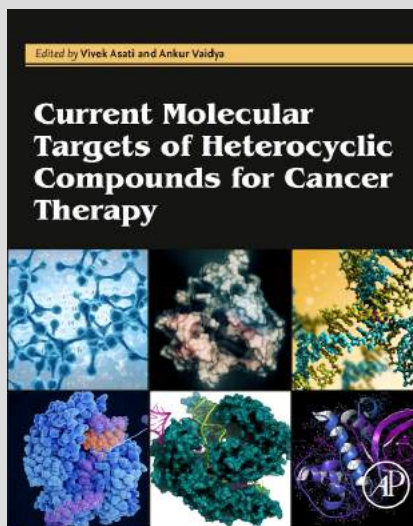
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Current Molecular Targets of Heterocyclic Compounds for Cancer Therapy

Edited by : **Vivek Asati**, PhD, Associate Professor, Department of Pharmaceutical Chemistry, ISF College of Pharmacy, Moga (Punjab), India and **Ankur Vaidya**, PhD., Assistant Professor, Faculty of Pharmacy, Uttar Pradesh University of Medical Sciences, Saifai, Etawah U.P. India

ISBN: 9780323961219
PUB DATE: May 01, 2024
LIST PRICE: £126.00 / \$165.00 / €143.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 465

AUDIENCE: Researchers and graduate students on cancer research, Researchers and graduate students on medicinal chemistry, molecular biology, pharmaceutical science

BIC CODES: UFL, MBF

THEMA CLASSIFICATION:

THEMAKJT; THEMAUFL

Presents recent developments on molecular targeted therapies for cancer, with a special focus on heterocyclic compounds

KEY FEATURES

- Discusses recently discovered molecular targets for cancer therapy
- Brings updated literature of heterocyclic compounds, an important construction motif for the development of new anticancer drugs
- Encompasses comprehensive compilation of recently introduced anticancer drugs in the market and their health outcomes and pharmacoeconomics

DESCRIPTION

Current Molecular Targets of Heterocyclic Compounds for Cancer Therapy discusses recently developed treatments based on molecular targets which are genetically altered in cancer cells and are essential for tumor development and survival. Considerable research effort has been devoted to the development of targeted drugs that inhibit the action of pathogenic kinases, and clinical studies performed so far have validated the positive effects of kinase inhibitors for cancer treatment. Each chapter discusses a molecular target, such as ALK2, ATR, CK, Src-Abl, EGFR, Fyn-Btk-Lyn, IGFs, and PAK1.

The book's chapters are written by experts who actively work on the targets to help readers fully understand how they can be used. This is a valuable resource for cancer researchers, oncologists, graduate students and members of the biomedical field who are interested in the potential of novel cancer therapies based on molecular targets.



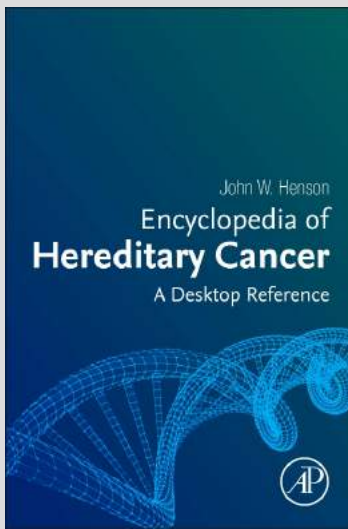
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Encyclopedia of Hereditary Cancer

A Desktop Reference

John W. Henson, Hereditary Cancer Clinic, Georgia Cancer Center, Augusta, GA, USA.

ISBN: 9780443135750

PUB DATE: May 01, 2024

LIST PRICE: £126.00 / \$165.00 / €143.00

DISCOUNT: Reference

FORMAT: Hardback

TRIM: 6.00w x 9.00h

PAGES: c. 372

AUDIENCE: Clinicians, oncologists, cancer researchers, geneticists, researchers with an interest in hereditary cancer and cancer genetics, genetic counselors, cancer surgeons, neuro-oncologists, gastroenterologists, internists, and family practitioner

BIC CODES: PSA

THEMA CLASSIFICATION: THEMAPS

Provides conceptual and factual treatments of 371 topics in hereditary cancer

KEY FEATURES

- Provides conceptual and factual treatments of 371 topics in hereditary cancer
- Gives quick access to a comprehensive guide on Hereditary Cancer
- Useful reference for researchers and clinicians

DESCRIPTION

Encyclopedia of Hereditary Cancer: A Desktop Reference gives insights into this young and rapidly expanding field that combines oncology and genetics to achieve risk reduction, early detection, family risk management, and identification targeted treatments. While genetics and oncology are both well-developed knowledge areas, their combination in hereditary cancer yields an opportunity for new works that systemize knowledge for current researchers, practitioners, and students. The book exams 371 topics through the lens of hereditary cancer. There are no similar books that presents information in this manner.

This reference work contains a complete list of terms and definitions which can be easily reference by researchers and clinicians working in this field.



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Allergic Asthma: Immunopathogenesis

Immunopathology of Allergic Asthma



Edited by
Seyyed Shamsadin Athari
Entezar Mehrabi Nasab



Allergic Asthma Immunopathogenesis

Immunopathology of the Allergic Asthma

Edited by : **Seyyed Shamsadin Athari**, MPH, PhD, Assistant Professor of Immunology and Allergy, Department of Immunology, School of Medicine, Zanjan University of Medical Sciences, Zanjan, Iran and **Entezar Mehrabi Nasab**, MD, Specialist of Cardiology, Department of Cardiology, School of Medicine, Tehran Heart Center, Tehran University of Medical Sciences, Iran

ISBN: 9780443155024
PUB DATE: May 01, 2024
LIST PRICE: £126.00 / \$165.00 /
€143.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 223

AUDIENCE: Researchers and scientists interested on pulmonology, allergy, and clinical immunology, Pulmonologists and subspecialists on allergy and immunology, Pharmaceutical industry to design new projects in R&D sections and produce new drugs, recognizing new pathways to produce target therapy

BIC CODES: PSA

THEMA CLASSIFICATION:
THEMAPS

A comprehensive reference on the allergic asthma molecular pathophysiology

KEY FEATURES

- Covers new molecular pathophysiology mechanisms and cell signaling pathways in pathogenesis of allergic asthma that have been introduced in recent research
- Discusses immunologic basis of the allergy and hyperresponsiveness
- Includes results of recent research focusing on the diagnosis and treatment of allergic asthma

DESCRIPTION

Allergic Asthma Immunopathogenesis: Immunopathology of the Allergic Asthma presents a new glance to the allergic asthma pathophysiology by focusing on the immunopathogenesis and allergeo-inflammation mechanisms of asthma and cell signaling pathways that can be used for various research purposes, including the design of anti-asthma treatment and target therapy for scientists and researchers. As asthma is a chronic, complicated airway disease whose mortality and morbidity rates have increased worldwide, some common treatments for asthma cannot control it nor even prevent simple inflammation and relieve shortness of breath. Thus, understanding its molecular pathways and pathophysiology is required in order to better understand the disease.



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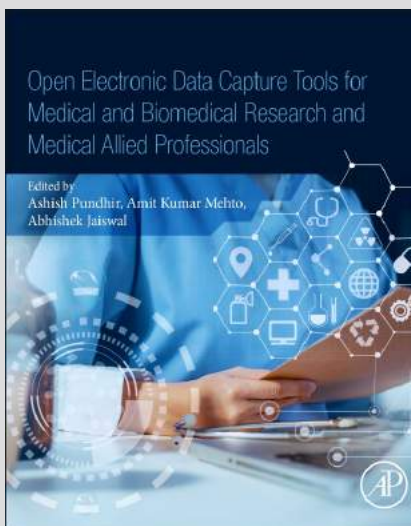
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Open Electronic Data Capture Tools for Medical and Biomedical Research and Medical Allied Professionals

Edited by : **Abhishek Jaiswal; Amit Kumar Mehto and Ashish Pundhir**

ISBN: 9780443156656
PUB DATE: May 01, 2024
LIST PRICE: £115.00 / \$150.00 / €130.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 232

AUDIENCE: Graduate students and researchers in bioinformatics and biostatistics, bioinformaticians

BIC CODES: MBF

THEMA CLASSIFICATION:
THEMAPSAX

Explains step-by-step how to successfully use open electronic data capture tools to manage research data

KEY FEATURES

- Explains how to use open electronic data capture tools to collect and treat research data
- Describes step-by-step how to use these tools with practical examples in illustrative manner by using screenshots, tables, and flow charts for easy understanding
- Presents the content in a didactic manner to facilitate real-world applicability for any research need

DESCRIPTION

Open Electronic Data Capture Tools for Medical and Biomedical Research and Medical Allied Professionals explains the step-by-step of collecting and treating research data in a didactic manner. The book discusses four freely available data capture tools whose common feature is data collection and entry being done simultaneously rather than separately, thus saving resources and minimizing potential errors. It highlights the comparative features of each data capture tool, helping readers to understand the advantage and disadvantage of each one to decide which tool can be used to fulfill their needs.

This is a valuable resource for researchers, students, and members of the biomedical and medical fields who need to learn more about data mining and management to improve the quality of their research work.



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COVER IMAGE
FORTHCOMING

Environmental Pollution and Type 2 Diabetes Mellitus

Sultan Ayoub Meo, MBBS, M.Phil, Ph.D, M Med Ed, FRCP, FRCP, FRCP,, Professor and Consultant in Clinical Physiology, Department of Physiology (29), College of Medicine, King Saud University

ISBN: 9780443216466
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LIST PRICE: £126.00 / \$165.00 / €143.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 307
AUDIENCE: Researchers, and Scientists, Physicians Climate sciences students and faculty, Health sciences faculty and students, Basic and Translational Researchers, Medical sciences researchers, Diabetes and endocrinology students, physicians and faculty, Policymakers
BIC CODES: MJGD
THEMA CLASSIFICATION: THEMAMFGM; THEMAMJG

Explains the impact of environmental pollution and how it increases diabetes mellitus

KEY FEATURES

- Offers unique scientific information, facts, and figures about environmental pollution and T2DM
- Highlights the air pollution condition of different countries on various continents and mechanisms allied to developing T2DM
- Provides information about countries highly polluted and countries less polluted, along with the epidemiological trends of T2DM

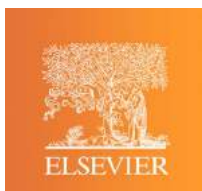
DESCRIPTION

Environmental Pollution and Type 2 Diabetes Mellitus elucidates on the global impact of environmental pollution and how it increases diabetes mellitus. Swift urbanization and the industrial revolution have increased environmental pollution to a hazardous level. Environmental pollution is a leading risk factor for several well-known diseases. This book opens venues for students, physicians, researchers, the science community, and policymakers to enhance their knowledge about environmental pollution, weather conditions, climate change, and their impact on insulin resistance and mechanisms allied to Type 2 diabetes mellitus (T2DM).

Moreover, this book will provide knowledge about the green space environment and its impact on T2DM.



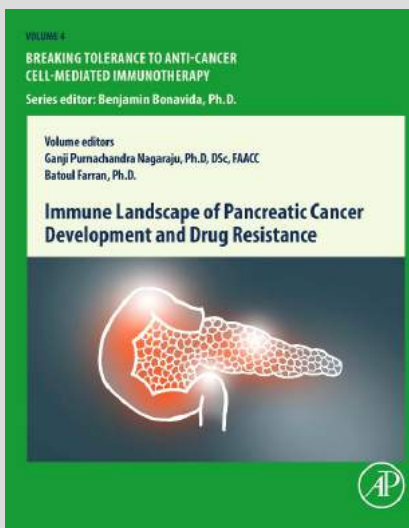
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Immune Landscape of Pancreatic Cancer Development and Drug Resistance, Vol 5

Edited by : **Batoul Farran**, Associate scientist, Department of Oncology, Albert Einstein College of Medicine, Bronx, USA and **Ganji Purnachandra Nagaraju**, Ph.D., Assistant Professor, School of Medicine, Division of Hematology and Oncology, University of Alabama, Birmingham, AL, United States.

ISBN: 9780443235238
PUB DATE: May 01, 2024
LIST PRICE: £142.00 / \$175.00 / €170.00
DISCOUNT: Reference
FORMAT: Hardback
TRIM: 191 x 235
PAGES: c. 307
AUDIENCE: Graduate students and researchers in cancer research
Oncologists, clinicians
BIC CODES: PSA
THEMA CLASSIFICATION:
THEMAPS

Provides an overview of potential combination strategies and the latest clinical trials in pancreatic cancer

A Volume in the *Breaking Tolerance to Anti-Cancer Cell-Mediated Immunotherapy* Series

KEY FEATURES

- Summarizes the potential combination strategies and latest clinical trials in pancreatic cancer
- Provides an in-depth overview of our current understanding of pancreatic cancer development, including its mutational and immune features
- Explores some of the new immune-based therapies aimed at targeting PC
- Shows pancreatic cancer progression and basic elements in tumor microenvironments and their role in PC progression, also covering immunotherapy strategies

DESCRIPTION

Immune Landscape of Pancreatic Cancer Development and Drug Resistance explores advances in immune-based therapies aimed at harnessing the power of the immune system against pancreatic cancer and rewiring tumor microenvironments to eradicate pancreatic cells. With a strong focus on the development of therapeutic methods to improve the survival rates of pancreatic cancer, this book also shows the latest trends in immune targeted approaches for pancreatic cancer treatment. In 12 chapters, the book discusses our current understanding of PC development and its various mutational and immune features and explore some of the new immune-based therapies aimed at targeting pancreatic cancer.

This book is a valuable resource for health professionals, scientists and researchers, students, and all those who wish to broaden their knowledge of advances in immunotherapy in pancreatic cancer.



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34th European Symposium on Computer Aided Process Engineering / 15th International Symposium on Process Systems Engineering, Vol 53

ESCAPE-34/PSE2024

Edited by : **Flavio Manenti**, Dipartimento di Chimica, Materiali e Ingegneria Chimica, Politecnico di Milano, Milano, Italy and **G.V. Rex Reklaitis**, Forney Hall of Chemical Engineering, Purdue University, West Lafayette, IN, USA

ISBN: 9780443288241
PUB DATE: May 20, 2024
LIST PRICE: £475.00 / \$585.00 / €550.00
DISCOUNT: Reference
FORMAT: Hardback
TRIM: 7.50w x 9.25h
PAGES: c. 1860
AUDIENCE: Chemical engineers, chemical process engineers, researchers in industry and academia, students, and consultants for chemical industries
BIC CODES: UFL, TDCB
THEMA CLASSIFICATION: THEMAUFL; THEMAKJT; THEMATDC

Presents findings and discussions from the International Symposium on Process Systems Engineering joint event

A Volume in the *Computer Aided Chemical Engineering Series*

KEY FEATURES

- Presents findings and discussions from the 34th European Symposium on Computer Aided Process Engineering / 15th International Symposium on Process Systems Engineering joint event

DESCRIPTION

The 34th European Symposium on Computer Aided Process Engineering, 15th International Symposium on Process Systems Engineering: ESCAPE-34/PSE2024, Volume 53 provides the latest information to come out of the International Symposium on Process Systems Engineering joint event. It is a valuable resource for chemical engineers, chemical process engineers, researchers in industry and academia, students, and consultants for chemical industries.



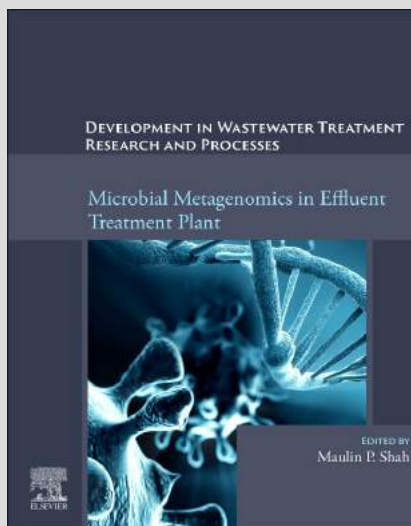
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CHEMISTRY Chemical Engineering

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Microbial Metagenomics in Effluent Treatment Plant

Edited by : **Maulin P Shah**, Chief Scientist and Head of the Industrial Waste Water Research Lab, Division of Applied and Environmental Microbiology Lab at Enviro Technology Ltd., Ankleshwar, Gujarat, India

ISBN: 9780443135316
PUB DATE: May 01, 2024
LIST PRICE: £180.00 / \$230.00 / €200.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 339

AUDIENCE: Environmental engineers, chemical engineers, environmental scientists, environmental biologists, environmental microbiologists, researchers, scientists, professors, students

BIC CODES: TDCB, RN, TQK, TQSR

THEMA CLASSIFICATION:

THEMATDC; THEMATQ;
THEMATQK; THEMARNH;
THEMATQSR

Provides various culture-independent molecular techniques that play an important role in the biogeochemical cycles, degradation, and detoxification of environmental pollutants

KEY FEATURES

- Presents text rich in information and knowledge of metagenomics
- Introduces novel and powerful insights into the already existing bioremediation process
- Serves as an easy-to-understand and centralized resource of information with practical application ideas

DESCRIPTION

Microbial Metagenomics in Effluent Treatment Plant introduces a metagenomic approach characterizing microbial communities in industrial wastewater treatment, providing an overall picture of metagenomics, its application, processes, and future prospects in the field of bioremediation. It also discusses culture-dependent methods, culture-independent methods, and enzymatic methods used to estimate bacterial diversity to monitor temporal and spatial changes in bacterial communities.

In addition, a metagenomic approach is discussed to characterize the microbial communities in industrial wastewater treatment. Researchers, scientists, professors, and students in environmental engineering, applied microbiology, and water treatment will find this book helpful in understanding the importance and role of metagenomics in biogeochemical cycles, degradation, and detoxification of environmental pollutants.



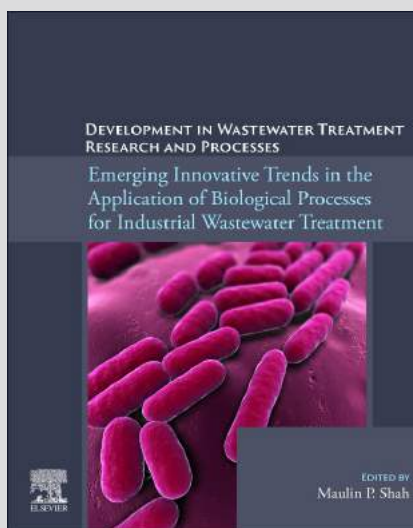
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Emerging Innovative Trends in the Application of Biological Processes for Industrial Wastewater Treatment

Edited by : **Maulin P Shah**, Chief Scientist and Head of the Industrial Waste Water Research Lab, Division of Applied and Environmental Microbiology Lab at Enviro Technology Ltd., Ankleshwar, Gujarat, India

ISBN: 9780443135613
PUB DATE: May 01, 2024
LIST PRICE: £180.00 / \$230.00 / €200.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 339

AUDIENCE: Environmental engineers, chemical engineers, environmental scientists, environmental biologists, environmental microbiologists, civil engineers, students

BIC CODES: TDCB, RN, TQK, TQSR

THEMA CLASSIFICATION:

THEMATDC; THEMATQ;
THEMATQK; THEMARNH;
THEMATQSR

Summarizes the latest findings on the innovative technologies used to treat industrial wastewater

KEY FEATURES

- Serves as an easy-to-use guider manual for all the enlisted smart techniques
- Describes and discusses the emerging futuristic technologies in industrial pollutants removal from wastewater
- Covers advancements in biological treatments, advanced oxidation techniques, and membrane technology to remove water pollutants

DESCRIPTION

Emerging Innovative Trends in the Application of Biological Processes for Industrial Wastewater Treatment discusses new and emerging innovative trends in the application of biological processes in industrial wastewater treatment. The book also includes the fate of chemicals produced after the treatment process both at the laboratory scale and at the industrial scale, explores the unique biological aspects of the wastewater treatment process, and highlights the advantages they provide for engineering applications in the industries. Each chapter covers a different biological-based approach and examines the basic principles, practical applications, recent breakthroughs, and associated limitations.

In addition, it also provides in-depth knowledge on the biological process for application in wastewater research which presents an array of cutting-edge wastewater treatment research and thereafter its applications in treatment, remediation, sensing, and pollution prevention processes which has a significant impact on maintaining the long-term quality, availability, and viability of water.



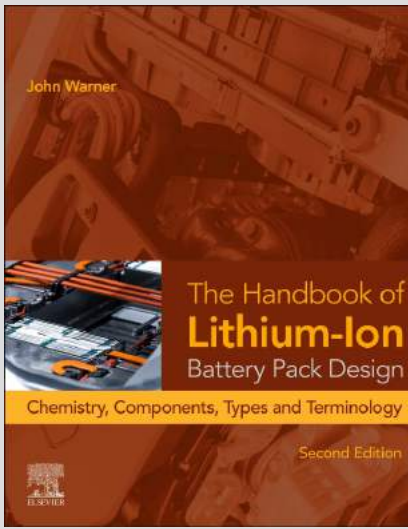
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The Handbook of Lithium-Ion Battery Pack Design, 2e

Chemistry, Components, Types, and Terminology

John T. Warner, Warner Energy Consulting, USA

ISBN: 9780443138072

PREVIOUS ISBN: 9780128014561

PUB DATE: May 01, 2024

LIST PRICE: £155.00 / \$200.00 /

€175.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 327

AUDIENCE: Graduates (and some upper undergraduates) studying courses on battery technology.

Researchers and engineers in industry entering the automotive industry and working on electric vehicles. Those

involved in some aspects of EV electrification such as managers, sales and other industrial or trade personnel interested in the overall development of batteries, EVs and new energy infrastructures such as charging; other experts in specific areas relating to the topic

BIC CODES: TDC

THEMA CLASSIFICATION:

THEMATDC

Provides a clear and concise explanation of EV and Li-ion batteries for readers new to the field

KEY FEATURES

- Adds a brief history of battery technology and its evolution to current technologies
- Expands and updates the chemistry to include the latest types
- Discusses thermal runaway and cascading failure mitigation technologies
- Expands and updates the descriptions of the battery module and pack components and systems
- Adds description of the manufacturing processes for cells, modules, and packs
- Introduces and discusses new topics such as battery-as-a-service, cell to pack and cell to chassis designs, and wireless BMS

DESCRIPTION

The Handbook of Lithium-Ion Battery Pack Design: Chemistry, Components, Types, and Terminology, Second Edition, provides a clear and concise explanation of EV and Li-ion batteries for readers that are new to the field. The second edition expands and updates all topics covered in the original book, adding more details to all existing chapters, and including major updates to align with all the rapid changes the industry has experienced over the past few years. The second edition adds two new chapters; the first delves into the processes of module and pack manufacturing, while the second introduces topics that are adjacent to the battery such as charging infrastructure, battery swapping, and charging as a service.

This handbook offers a layman's explanation of the battery industry and technology, including the history of vehicle electrification and battery technology, describing the various terminologies and acronyms, and explaining how to do simple calculations that can be used in determining basic battery sizing, capacity, voltage, and energy. By the end of reading this book, the reader will have a solid understanding of the terminology around Li-ion batteries and be able to undertake simple battery calculations.



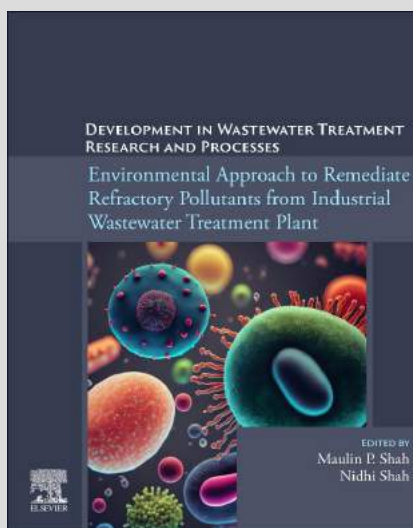
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Environmental Approach to Remediate Refractory Pollutants from Industrial Wastewater Treatment Plant

Edited by : **Maulin P Shah**, Chief Scientist and Head of the Industrial Waste Water Research Lab, Division of Applied and Environmental Microbiology Lab at Enviro Technology Ltd., Ankleshwar, Gujarat, India and **Nidhi Shah**

ISBN: 9780443138843
PUB DATE: May 01, 2024
LIST PRICE: £180.00 / \$230.00 / €200.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 435

AUDIENCE: Researchers in academia and industry, and postgraduate students working on advance oxidation process and effluent treatment plants, environmental microbiologists, environmental biotechnologists, microbiologists, environmental engineers and those working in the bioremediation field

BIC CODES: TDCB, TC, TQSW1, PSG

THEMA CLASSIFICATION: THEMATDC; THEMAPSG; THEMATQSW

Presents cutting-edge wastewater treatment approaches and their applications in treatment, remediation, sensing and pollution prevention processes

KEY FEATURES

- Describes emerging technologies in industrial pollutants removal from wastewater
- Includes applications in treatment, remediation, sensing, and pollution prevention processes
- Discusses impacts on long-term quality, availability, and viability of water

DESCRIPTION

Environmental Approach to Remediate Refractory Pollutants from Industrial Wastewater Treatment Plants discusses the emerging trends in the bioremediation of hazardous pollutants found in wastewater, including the fate of pollutants produced after the treatment process both at the laboratory scale and at the industrial scale. Describing a broad area of biological processes and water research – considered key components for advanced water purification – it also includes the desalination technologies that remove, reduce, or neutralize water contaminants that threaten human health.

Exploring the unique biological aspects of the wastewater treatment process, the book highlights the advantages they provide for engineering applications in industry, with each chapter covering a different biological-based approach, examining the basic principles, practical applications, recent breakthroughs and associated limitations.



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Towards Nanofluids for Large-Scale Industrial Applications

Edited by : **Bharat A. Bhanvase**, Professor and Head, Chemical Engineering Department, Laxminarayan Institute of Technology, RTM Nagpur University, Nagpur, Maharashtra, India; **Divya Barai**, Department of Chemical Engineering, Laxminarayan Institute of Technology, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, India; **Gawel Zyla**, Department of Physics and Medical Engineering, Rzeszów University of Technol, Poland and **Zafar Said**, Associate Professor, Department of Sustainable Renewable Energy Engineering, University of Sharjah, United Arab Emirates

ISBN: 9780443154836
PUB DATE: May 01, 2024
LIST PRICE: £155.00 / \$200.00 / €175.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 445

AUDIENCE: Graduate/postdoc level students and researchers/academics teaching or studying in chemical and thermal engineering and focused on heat transfer enhancement, thermal energy, nanofluids, and nano-enhanced energy systems such as solar thermal systems. Researchers globally in other related interdisciplinary areas including Chemistry, mechanical engineering, Materials Science and Technology, Nanotechnology, Energy Conservation, and Sustainable Development. Manufacturing industries and consultants dealing with energy conservation, sustainable development, and process intensification, those in the energy industry focusing on renewable energy technologies, as well as research and development sections of industries based on process heat transfer intensification, thermal management, and related markets

BIC CODES: PHH

THEMA CLASSIFICATION:
THEMAPHH



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Examines the challenges and current progress towards large-scale industrial application of nanofluids, summarizing existing research and providing potential solutions pertaining to the scientific, economic, and social barriers that currently exist

KEY FEATURES

- Examines the challenges and current progress towards implementing large-scale industrial application of nanofluids
- Addresses current gaps in research, explores challenges and controversies as well as weaknesses and strengths versus alternative solutions
- Aims to bridge the gap between fundamental research and potential industrial-scale utilization in the future by providing pathways towards convenient and sustainable scale-up
- Meets a need to compile all current information and knowledge from studies and research related to large-scale nanofluids applications in one single resource

DESCRIPTION

Nanofluids for Large-Scale Industrial Applications examines the challenges and current progress towards large-scale industrial application of nanofluids, summarizing and bringing together varied current research strands and providing potential solutions pertaining to the scientific, economic, and social barriers that currently exist.

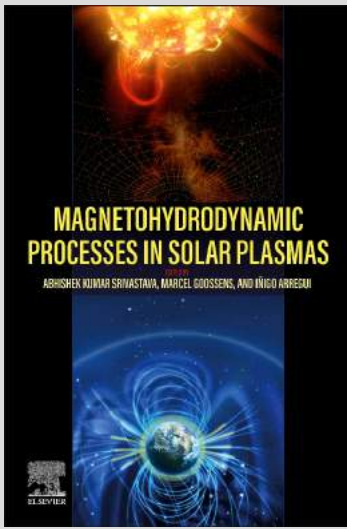
Opening with an introduction to nanofluid synthesis, types, and properties, this book traverses the potential large-scale applications and commercialisation of nanofluids in industrial heating/cooling, solar energy systems, refrigeration systems, automotive systems, and various chemical processes and manufacturing systems.

This book provides knowledge of a vast area of applications of nanofluids in industries. Thus, it also has potential to encourage and trigger the minds of researchers to discover more about nanofluids, investigate the gaps, overcome the challenges, and provide future directions for newer applications and develop nanofluids further. The book is written chiefly for graduate/postdoc level students and researchers/academics teaching or studying in chemical and thermal engineering and who are focused on heat transfer enhancement, thermal energy, nanofluids, and nano-enhanced energy systems such as solar thermal systems.

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Magnetohydrodynamic Processes in Solar Plasmas

Edited by : **Abhishek Kumar Srivastava**, Professor of Physics, Indian Institute of Technology (Banaras Hindu University), Varanasi, India; **Marcel Goossens**, Professor Emeritus in Applied Mathematics, Centre of mathematical Plasma Astrophysics, Department of Mathematics, KU Leuven, Belgium and **Iñigo Arregui**, Staff Researcher, Instituto de Astrofísica de Canarias, Universidad de la Laguna, Spain

ISBN: 9780323956642
PUB DATE: May 31, 2024
LIST PRICE: £126.00 / \$165.00 / €143.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 288

AUDIENCE: Postgraduates, PhD students, researchers, academics and professionals in the fields of astronomy and astrophysics, Solar System science and solar physics Interdisciplinary researchers in planetary science, plasma science, controlled fusion reaction and high energy physics

BIC CODES: TTD

THEMA CLASSIFICATION: THEMATTD

A comprehensive, up-to-date overview of magnetohydrodynamic processes in the solar plasma of our sun

KEY FEATURES

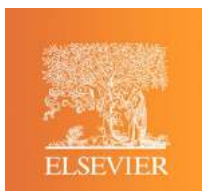
- Applies fundamental solar science and research in magnetohydrodynamic processes to practice, with worked examples to elucidate real-world uses in research
- Covers the latest developments in solar plasma processes in terms of both theoretical and practical aspects, with the latest observational data included for reference
- Includes pull sections in each chapter that highlight the most fundamental and key aspects of solar physics using schematic and associated basic facts
- Provides basic numerical question sets related to each chapter, along with worked examples, which will enhance understanding of basic phenomena and aid in applying the practical content to current research

DESCRIPTION

Magnetohydrodynamic Processes in Solar Plasmas provides comprehensive and up-to-date theory and practice surrounding the fundamentals of heliospheric research and the Sun's basic plasma processes, covering the dynamics of the solar interior to its exterior in the framework of magnetohydrodynamics. The book covers novel aspects of solar and heliospheric physics, astrophysics, space science, and fundamentals of the fluids and plasmas. Topics covered include key phenomena in the solar interior such as magnetism, dynamo physics, and helioseismology, dynamics and plasma processes in its exterior, including fluid processes such as waves, shocks, instabilities, reconnection, dynamics in the partially ionized plasma, and much more. The book covers both the fundamentals of the topics included as well as current and future developments in the field, forming an essential, foundational reference for researchers, academics, and advanced students, in the field of solar physics and astrophysics, as well as neighboring disciplines.



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EARTH & ENVIRONMENT

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Green Approaches in Medicinal Chemistry for Sustainable Drug Design, Vol 1, 2e

Applications

Edited by : **Bimal Krishna Banik**, Vice President of Research and Education Development, Community Health Systems of South Texas, USA

ISBN: 9780443161667
PUB DATE: May 15, 2024
LIST PRICE: £180.00 / \$230.00 / €200.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 558
AUDIENCE: Medicinal chemists, pharmaceutical, biotechnologists, green chemists and environmental chemists working in both academia and industry; postgraduate students in related fields. Scientists working in Government Research Agencies; industrial scientists
BIC CODES: PNN, MMG
THEMA CLASSIFICATION: THEMAMKG; THEMAPPN

A guide to understanding and implementing effective green medicinal chemistry for improved sustainability in the drug discovery process

A Volume in the *Advances in Green and Sustainable Chemistry Series*

KEY FEATURES

- Highlights the need for adoption of sustainable and green chemistry pathways in drug development
- Reveals risk factors associated with the drug development process and the ways sustainable approaches can help address these
- Identifies novel and cost effective green medicinal chemistry approaches for improved efficiency and sustainability

DESCRIPTION

Sustainable and Green Approaches in Medicinal Chemistry: Applications, Second Edition reveals essential context on the growth of green chemistry in relation to drug discovery, identifying a broad range of practical techniques and useful insights and revealing how medicinal chemistry techniques can be used to improve efficiency, mitigate failure, and increase the environmental benignity of the entire drug discovery process. The book encourages the growth of green medicinal chemistry and supports medicinal chemists, drug discovery researchers, pharmacologists, and all those in related fields across both academia and industry in integrating these approaches into their own work.

This volume includes the development of nanoparticles and nanocomposites, as well as the application of ultrasound and microwave-induced methods; studies solventless synthesis; defines the role of steroids; studies reactions in aqueous solution; identifies enzyme-mediated reactions; investigates ionic liquids and deep eutectic solvents; explores natural products; investigates solid supports; realizes the effects of salts; focuses on combinatorial chemistry; develops one-pot methods; analyzes multi-component reactions; investigates dipole moment values; and examines computer-assisted methods.



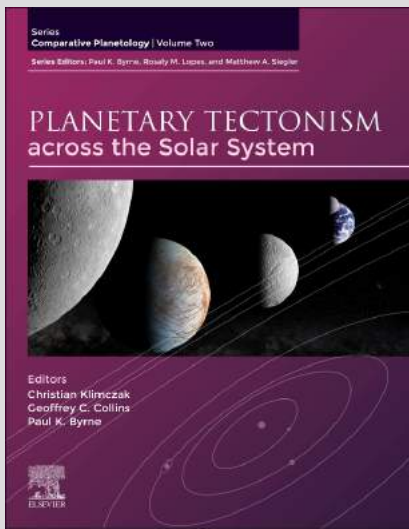
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CHEMISTRY Organic Chemistry

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Planetary Tectonism across the Solar System, Vol 2

Edited by : **Christian Klimczak**, Assistant Professor, Department of Geology, University of Georgia - Athens, GA, USA; **Geoffrey C. Collins**, Professor of Geology, Department of Physics and Astronomy, Wheaton College, Norton, MA, USA and **Paul K. Byrne**, Assistant Professor, Department of Marine, Earth, and Atmospheric Sciences, North Carolina State University - Raleigh, NC, USA

ISBN: 9780128160923
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DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 372
AUDIENCE: Planetary Scientists, Geologists, Geophysicists, seismologists, structural geologists, remote sensing specialists, third-level (i.e., college/university) educators delivering terrestrial and/or planetary tectonism materials to undergraduate students at first- and second-year levels
BIC CODES: PHVG, TTD, RBG
THEMA CLASSIFICATION: THEMAPHVG; THEMATTD; THEMARBG

Presents a systematic, cohesive approach to comparing and contrasting tectonism across the vast array of planetary bodies in the Solar System, including Earth

A Volume in the *Comparative Planetology Series*

KEY FEATURES

- Includes an introduction that places the book in the context of the larger Comparative Planetology series
- Compares tectonic processes on all relevant Solar System bodies, providing a systems-level understanding of this widespread phenomenon that shapes and drives the evolution of planets, moons and smaller bodies
- Features over 100 color illustrations and charts to better convey concepts
- Offers additional online content, including figures, animations, videos and interviews with contributing authors

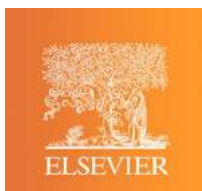
DESCRIPTION

Planetary Tectonism across the Solar System, Volume Two in the Comparative Planetology series, addresses key questions surrounding planetary tectonism, such as our understanding of the global contraction of Mercury, the formation of giant rift zones on Saturn's icy moons, or the tesserated terrain on Venus. The book makes connections to Earth, such as how deformation on Mercury is both similar and different, and how to apply theoretical considerations behind plate tectonics on Earth to other planets. The book offers up-to-date, accessible and comprehensive discussions on the major tectonic processes and landforms that shape and drive the evolution of planets, moons and smaller bodies.

By placing a singular emphasis on comparing tectonic processes and landforms on all relevant Solar System bodies, with the explicit objective of providing a systems-level understanding of this widespread phenomenon, this book is ideal for anyone studying planetary tectonism.



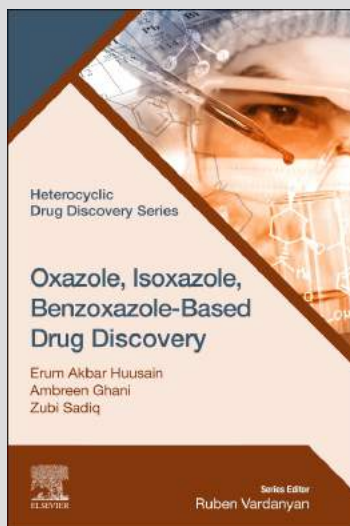
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Oxazole, Isoxazole, Benzoxazole-Based Drug Discovery

Erum Akbar Hussain, Tenured Associate Professor, Lahore College, Women University, Pakistan; **Ambreen Ghani**, Assistant Professor, Division of Science and Tech, University of Education, Pakistan and **Zubi Sadiq**, Research Associate, Department of Chemistry, Lahore College, Pakistan

ISBN: 9780323853866
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LIST PRICE: £175.00 / \$225.00 / €200.00
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FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 391
AUDIENCE: Researchers in organic chemistry both in academic and industrial settings, postgraduates in chemistry and medicinal chemistry, Researchers in pharmaceutical industries, chemical and pesticide industries
BIC CODES: PNN
THEMA CLASSIFICATION: THEMAPPN

Offers complete coverage of oxazole and related molecules, both from natural and synthetic origin, with a focus on the reaction mechanisms and medicinal aspects

A Volume in the *Heterocyclic Drug Discovery* Series

KEY FEATURES

- Presents detailed coverage of chemical structures and practical synthetic methods of oxazoles, isoxazoles and benzoxazoles in drug discovery
- Includes green, environmentally-friendly novel synthetic methods and mechanistic insights
- Features biological and computational aspects of the oxazoles family of drugs, including virtual screening and molecular docking

DESCRIPTION

Oxazole, Isoxazole, Benzoxazole Based Drug Discovery offers complete coverage of oxazole and related molecules, both from natural and synthetic origin, with a focus on the reaction mechanisms, and medicinal, pharmacokinetic and computational aspects. New and contemporary methods of synthesis are discussed, with a special focus on green, environment-friendly procedures. Discussion of stereochemical studies, particularly on natural molecules, are included. Computational chemistry has emerged as an integral tool for drug discovery, hence this book explains how the drug candidate is established as suitable for clinical trials with the help of molecular docking and virtual screening modeling.

This book offers a broad range of recent developments and detailed coverage of synthesis and biological activities of the drugs, and is an ideal reference guide to researchers working in organic and medicinal chemistry.



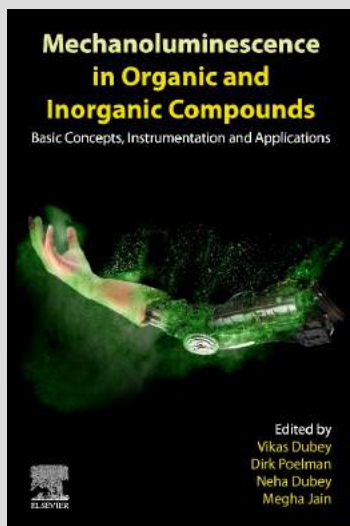
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Mechanoluminescence in Organic and Inorganic Compounds

Basic Concepts, Instrumentation, and Applications

Edited by : **Vikas Dubey**, Dean of Research and Development, Associate Professor and Head, Department of Physics, Bhilai Institute of Technology, Raipur, India; **Dirk Poelman**, Professor, Lumilab, Department of Solid State Sciences, Ghent University, Gent, Belgium; **Neha Dubey**, Principal Investigator, Govt.V.Y.T.PG. Autonomous College, Durg, India and **Megha Jain**, Senior Research Fellow in the Department of Basic and Applied Sciences at Punjabi University, in India.

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TRIM: 6.00w x 9.00h
PAGES: c. 279
AUDIENCE: Graduate students, researchers, and industry professionals in nuclear and thermal power generation, defense, luminescent materials, chemical materials, and biomedicine Universities, colleges, research institutions, independent researchers, libraries
BIC CODES: TCB
THEMA CLASSIFICATION: THEMATCB

Comprehensive analysis of mechanoluminescence in organic and inorganic compounds and its applications in optics, forensics, energy harvesting, medicine and smart robotics

KEY FEATURES

Approx.280 pages

DESCRIPTION

Mechanoluminescence in Organic and Inorganic Compounds: Basic Concepts, Instrumentation and Applications provides a comprehensive overview of mechanoluminescence for newly qualified researchers and scientists across multiple related fields. It serves as a guide for budding scientists to advance in the field through various applications covered in this book, such as energy, mechanics, medicine and optics. This reference shines light on the pros and cons of utilizing organic or inorganic mechanoluminescent materials, making it a handy tool for worldwide researchers involved in luminescence such as optoelectronics, sensors, forensics, displays, energy harvesting and smart robotics.

The editors and their expert contributors summarize these applications, making it a valuable resource for academics, researchers and those working in industry. The broad coverage, which progresses from theory to applications, serves as a complete reference of global research and experience, which will work to inform and guide the development of more efficient devices for the future.



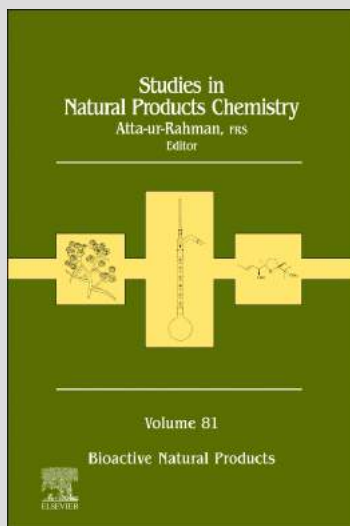
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CHEMISTRY Organic Chemistry

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Studies in Natural Products Chemistry, Vol 81

Atta-Ur Rahman, Chairma, United Nations' committee on Science, Technology and Innovation, Pakistan

ISBN: 9780443156281

PUB DATE: May 01, 2024

LIST PRICE: £240.00 / \$315.00 /

€270.00

DISCOUNT: Reference

FORMAT: Hardback

TRIM: 6.00w x 9.00h

PAGES: c. 465

AUDIENCE: Natural product chemists, medicinal chemists, pharmacologists as well as academic and industry researchers

BIC CODES: PNN

THEMA CLASSIFICATION:

THEMAPNN

Presents current frontiers and future guidelines for research based on important discoveries made in the field of bioactive natural products

A Volume in the *Studies in Natural Products Chemistry Series*

KEY FEATURES

- Focuses on the chemistry of bioactive natural products
- Contains contributions by leading authorities in the field
- Presents sources of new pharmacophores

DESCRIPTION

Studies in Natural Products Chemistry, Volume 81 covers the synthesis or testing and recording of the medicinal properties of natural products, providing cutting-edge accounts on fascinating developments in the isolation, structure elucidation, synthesis, biosynthesis and pharmacology of a diverse array of bioactive natural products. Natural products in the plant and animal kingdom offer a huge diversity of chemical structures that are the result of biosynthetic processes that have been modulated over the millennia through genetic effects.

With the rapid developments in spectroscopic techniques and accompanying advances in high-throughput screening techniques, it has become possible to isolate and then determine the structures and biological activity of natural products rapidly, thus opening up exciting opportunities in the field of new drug development to the pharmaceutical industry.



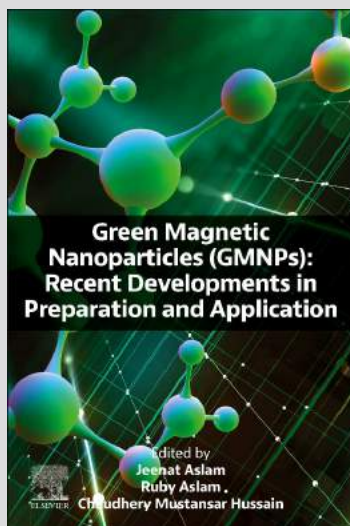
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Green Magnetic Nanoparticles (GMNPs)

Recent Developments in Preparation and Application

Edited by : **Ruby Aslam**, School of Civil Engineering and Architecture, Chongqing University of Science and Technology, Chongqing, China; **Chaudhery Mustansar Hussain**, PhD, New Jersey Institute of Technology, Newark, NJ, USA and **Jeenat Aslam**, Department of Chemistry, College of Science, Taibah University, Yanbu, Al-Madina, Saudi Arabia

ISBN: 9780443218958
PUB DATE: May 01, 2024
LIST PRICE: £165.00 / \$200.00 / €190.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 372
AUDIENCE: Graduate students and researchers from Chemistry and Chemical Engineering working with green magnetic nanoparticles
BIC CODES: TJ
THEMA CLASSIFICATION: THEMATJFD

Highlights established research and technology on nanomaterials, nanocomposites, and other alternative materials for different applications

KEY FEATURES

- Covers the synthesis, characterization, properties and applications of green magnetic nanoparticles
- Highlights the use of green magnetic nanoparticles as revolutionized modern industrial practices
- Evaluates green magnetic nanoparticles as prime options for smart and transformational opportunities

DESCRIPTION

Green Magnetic Nanoparticles (GMNPs): Recent Developments in Preparation and Application highlights established research and technology on nanomaterials, nanocomposites, and other alternative materials to be used for different applications, including their rapid move into emerging aspects and future research directions. The book provides academia and industry with a high-tech start-up that will revolutionize the modern developments in synthesis and applications of green magnetic nanoparticles. It evaluates green magnetic nanoparticles as prime options for smart and transformational opportunities.

Nanomaterials and nanocomposites are the most effective materials to be used in different industrial applications. Green nanotechnology incorporates the principles of green chemistry and green engineering to fabricate innocuous and eco-friendly nanoassemblies to combat problems affecting both human health and the environment.



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CHEMISTRY Organic Chemistry

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Encyclopedia of Sustainable Technologies, 2e

Martin Abraham, State University of New York Brockport, USA

ISBN: 9780323903868
PREVIOUS ISBN: 9780128046777
PUB DATE: May 01, 2024
LIST PRICE: £1940.00 / \$2400.00 / €2265.00

DISCOUNT: MRW

FORMAT: Hardback

TRIM: 8.50w x 10.875h

PAGES: c. 2697

ILLUSTRATIONS: Approx. 1200 illustrations (1200 in full color)

AUDIENCE: Sustainability researchers and students in environmental science, engineering, geoscience and environmental economics

BIC CODES: RN, TQD, TCB, RG, RNU

THEMA CLASSIFICATION:

THEMATQ; THEMADPM;
THEMATCB; THEMARG;
THEMARN; THEMARN

A unique, comprehensive resource on sustainable technologies, which starts from systems-level analysis to explain the impact of products and processes on our society and the environment

KEY FEATURES

- A comprehensive resource to understand the relationship between economic opportunity, environmental impact and social justice, allowing the reader to weigh the trade-offs associated with the implementation of technological solutions
- A systems analysis approach provides deeper understanding of the impacts of technology on the world, ecology, and human health
- Expands the previous edition with significant updates and new focus on climate change, resiliency and modularity, artificial intelligence and computing
- Each chapter examines a technological solution guiding the reader with consistent format and language, bridging the gap between specialities

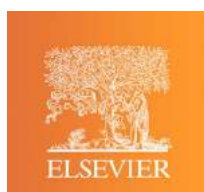
DESCRIPTION

While technological advancement leads to societal benefits in terms of economic growth, it also brings with it challenges in its impact on the environment or human health. Sustainable development seeks a uniform means of comparing the economic benefits with the environmental and health costs associated with the implementation of a new technology.

This revised encyclopedia investigates sustainability initiatives across a range of industries, providing insight into future opportunities for technological development. A broad spectrum of human challenges have only become more intense since publication of the first edition. For example, climate change is now observed across the globe as a contributor to large scale weather events, including extreme drought in Australia, intense wildfires in California, and flooding along the great rivers of Africa, North and South America. Land in the Amazon rain forest is destroyed to provide increased cropland, contributing to climate change. Expansion of the use of biomass as a raw material in chemical processing leads to food shortages. In many cases, these challenges have the greatest impact on the poorest nations, and the most polluting manufacturing facilities are located in the poorest communities, demonstrating social justice challenges.



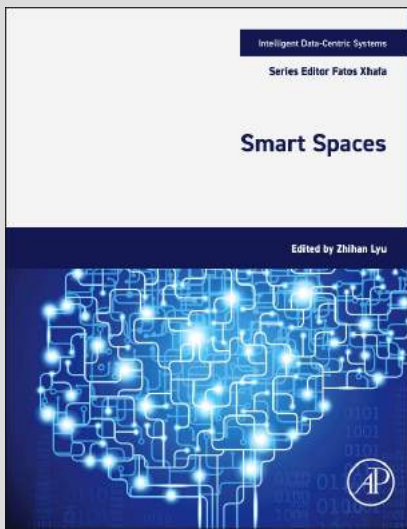
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MAJOR REFERENCE WORKS Earth & Environment

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Smart Spaces

Edited by : **Zhihan Lyu**, Senior Lecturer/Associate Professor at Department of Game Design, Uppsala University, Campus Gotland, Sweden

ISBN: 9780443134623
PUB DATE: May 01, 2024
LIST PRICE: £134.00 / \$175.00 / €155.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 520

AUDIENCE: Researchers, scientists, developers, practitioners, and graduate and undergraduate students from academia and industry working in the field of smart spaces and related fields

BIC CODES: UY, UMB, UB, UYQE, UYQ, PBD

THEMA CLASSIFICATION:
THEMAUMB; THEMABPD;
THEMAUNC; THEMAUYQ;
THEMAUYQE; THEMAKJ;
THEMAUFL; THEMAUY

Summarizes the latest concepts, technologies, and applications of smart spaces, providing readers with a deeper understanding of this emerging discipline

A Volume in the *Intelligent Data-Centric Systems Series*

KEY FEATURES

- Comprehensively introduces smart spaces, from basic concepts, core technologies, technical architecture, application scenarios, and other aspects
- Covers the latest cutting-edge application technology of smart spaces in various fields, providing relevant practitioners with ideas to solve problems and have a deeper understanding of smart spaces
- Serves as teaching material or as a reference for teachers and students of interaction design, internet of things, ubiquitous and pervasive computing, and artificial intelligence
- Gives a detailed introduction to the theory of Smart Spaces and uses mathematical formulas

DESCRIPTION

Smart Spaces covers the latest concepts and technologies surrounding smart spaces, providing technical personnel engaged in smart space related research and industries a more in-depth understanding of smart spaces. This book can be used as a reference for practicing this emerging discipline, but it will also be useful for researchers, scientists, developers, practitioners, and graduate students working in the fields of smart spaces and artificial intelligence. It combines the study of working or living spaces with computing, information equipment, and multimodal sensing devices, and with natural and convenient interactive interfaces to support how people can easily obtain services from computer systems.

People's work and life in smart spaces use computer systems; it is a process of uninterrupted interaction between people and the computer system. In this process, the computer is no longer just an information processing tool that passively executes explicit human operation commands but a collaborator with people to complete tasks – a partner to human beings. International research on smart spaces is quite extensive, which shows the important role of smart spaces in ubiquitous computing research.



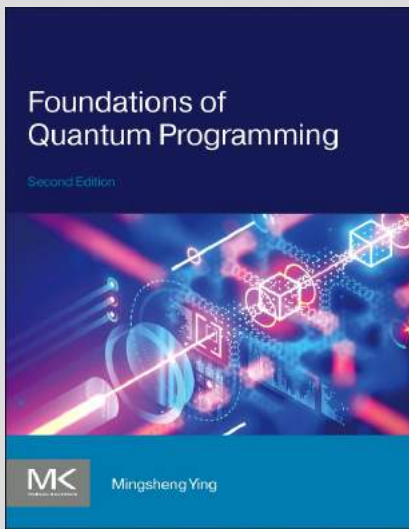
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COMPUTING

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Foundations of Quantum Programming, 2e

Mingsheng Ying, Deputy Director for Research, Institute of Software, Chinese Academy of Sciences; Director, Centre for Quantum Software, Tsinghua University and and Hui Yan Chair Professor of Computer Science, Tsinghua University, China

ISBN: 9780443159428

PREVIOUS ISBN: 9780128023068

PUB DATE: May 01, 2024

LIST PRICE: £115.00 / \$150.00 / €130.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 191 x 235

PAGES: c. 372

AUDIENCE: Computer Science researchers, software engineers, programmers, and Quantum software researchers in academia and industry. Graduate students and senior undergraduate students in Computer Science and quantum technology

BIC CODES: GPF

THEMA CLASSIFICATION: THEMAGPF; THEMAUYZM

Presents a methodical and thorough explanation of quantum programming, including new developments in parallel and distributed quantum programming

KEY FEATURES

- Demystifies the theory of quantum programming using a step-by-step approach
- Includes methodologies, techniques, and tools for the development, analysis, and verification of quantum programs and quantum cryptographic protocols
- Covers the interdisciplinary nature of quantum programming by providing preliminaries from quantum mechanics, mathematics, and computer science, and pointing out its potential applications to quantum engineering and physics
- Presents a coherent and self-contained treatment that will be valuable for academic and industrial researchers and developers
- Adds new developments such as parallel and distributed quantum programming; and introduces several new program analysis techniques such as invariants generation and abstract interpretation

DESCRIPTION

Foundations of Quantum Programming, Second Edition provides a systematic exposition of the subject of quantum programming. Emphasis is placed on foundational concepts, methods, and techniques that can be widely used for various quantum programming models and languages. The book describes how programming methodologies developed for current computers can be extended for quantum computers, along with new programming methodologies that can effectively exploit the unique power of quantum computing. In addition, this resource introduces a chain of quantum programming models from sequential to parallel and distributed programming in the paradigm of superposition-of-data to the paradigm of superposition-of-programs.

Final content presents a series of logical and mathematical tools for verification and analysis of quantum programs, including invariant generation, termination analysis, and abstract interpretation.



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Intelligent Fractal-Based Image Analysis

Applications in Pattern Recognition and Machine Vision

Edited by : **Soumya Ranjan Nayak**, Assistant Professor, Amity School of Engineering and Technology, Amity University Uttar Pradesh, Noida, India; **Janmenjoy Nayak**, Department of Computer Science, Maharaja Sriram Chandra Bhanja Deo (MSCBD) University, Mayurbhanj, India; **Khan Muhammad**, Assistant Professor, Department of Interaction Science and Director of Visual Analytics for Knowledge Laboratory (VIS2KNOW Lab), Sungkyunkwan University, Seoul, South Korea and **Yeliz Karaca**, Assistant Professor of Applied Mathematics and Researcher, University of Massachusetts Medical School, Worcester, Massachusetts, USA

ISBN: 9780443184680
PUB DATE: May 01, 2024
LIST PRICE: £123.00 / \$160.00 / €139.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 325
AUDIENCE: Researcher data scientists, industry professionals, and graduate students in the field of fractal graphics and its related applications
BIC CODES: UMB, UYQV, TB, UFL, UYQ, PBD
THEMA CLASSIFICATION: THEMAUMB; THEMABPD; THEMAUYQV; THEMAUYQP; THEMAKJT; THEMAUFL; THEMAUYQ

Investigates recent trends in the research and application of fractal image analysis using fractal theory

A Volume in the *Cognitive Data Science in Sustainable Computing Series*

KEY FEATURES

- Investigates advanced fractal theories spanning neural networks, fuzzy logic, machine learning, deep learning, and hybrid intelligent systems in solving pattern recognition problems
- Explores the application of fractal theories to a wide range of medical image processing modalities
- Presents case studies that illustrate the application and integration of fractal theories into intelligent computing in the resolution of important pattern recognition and machine vision problems

DESCRIPTION

Intelligent Fractal-Based Image Analysis: Application in Pattern Recognition and Machine Vision provides insights into the current strengths and weaknesses of different applications as well as research findings on fractal graphics in engineering and science applications. The book aims to improve the exchange of ideas and coherence between various core computing methods and highlights the relevance of related application areas for advanced as well as novice-user application. The book presents core concepts, methodological aspects, and advanced feature opportunities, focusing on major, real-time applications in engineering and health science. It will appeal to researchers, data scientists, industry professionals, and graduate students.

Fractals are infinite, complex patterns used in modeling physical and dynamic systems. Fractal theory research has increased across different fields of applications including engineering science, health science, and social science. Recent literature shows the vital role fractals play in digital image analysis, specifically in biomedical image processing. Fractal graphics is an interdisciplinary field that deals with how computers can be used to gain high-level understanding from digital images. Integrating artificial intelligence with fractal characteristics has resulted in new interdisciplinary research in the fields of pattern recognition and image processing analysis.



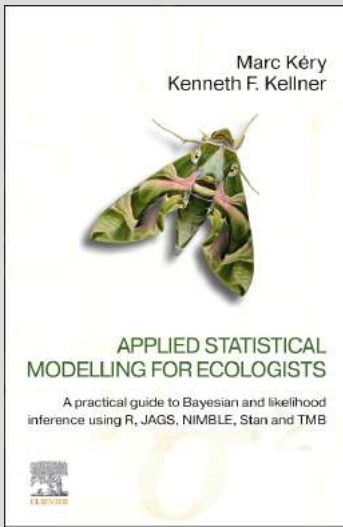
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Applied Statistical Modelling for Ecologists

A Practical Guide to Bayesian and Likelihood Inference Using R, JAGS, NIMBLE, Stan and TMB

Marc Kéry, Senior Scientist, Swiss Ornithological Institute, Basel, Switzerland and Kenneth F. Kellner, Assistant Research Professor, Michigan State University, MI, USA

ISBN: 9780443137150
PUB DATE: Jun 01, 2024
LIST PRICE: £68.95 / \$89.95 / €77.95
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 484
AUDIENCE: Environmental science researchers, Ecologists, Biologists, and Wildlife Managers as well as upper-level graduate and graduate ecology, biology, biogeography, conservation biology, fisheries and wildlife management students
BIC CODES: RNC, PBT, RN
THEMA CLASSIFICATION: THEMPSAF; THEMABPT; THEMATQ

Provides applied statistical modeling in almost any subject matter for any scientist needing to learn statistical modeling

KEY FEATURES

- Provides a comprehensive, applied introduction to some of the most exciting, cutting-edge model fitting software packages: JAGS, Nimble, Stan, and TMB
- Covers all the basics of the modern applied statistical modeling that have become a key part of any natural science, including linear, generalized linear, mixed and also hierarchical models
- Provides applied introduction to the two dominant methods of parametric statistical modeling: maximum likelihood and Bayesian inference
- Adopts what could be called a "Rosetta stone approach," wherein understanding of one software, and of its associated language, will be greatly enhanced by seeing the analogous code in one of the other engines

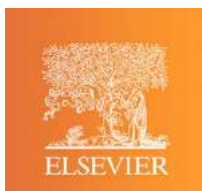
DESCRIPTION

Applied Statistical Modelling for Ecologists: A Practical Guide to Bayesian and Likelihood Inference Using R, JAGS/Nimble, Stan and TMB provides an important guide and comparison of powerful new software packages that are now widely used in research publications, including JAGS, Stan, Nimble, and TMB. It provides a gentle introduction to the most exciting specialist software that is often used to conduct cutting-edge research, along with Bayesian statistics and frequentist statistics with its maximum likelihood estimation method. In addition, this book is simple and accessible, allowing researchers to carry out and understand statistical modeling.

Through examples, the book covers the underlying statistical models widely used by scientists across many disciplines. Thus, this book will be useful for anyone who needs to quickly become proficient in statistical modeling, and in the model-fitting engines covered.



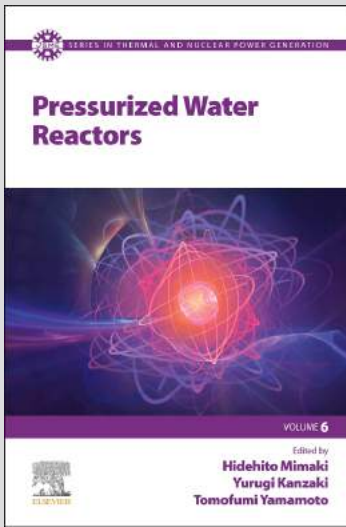
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EARTH & ENVIRONMENT Ecology

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Pressurized Water Reactors

Edited by : Yurugi Kanzaki; Hidehito Mimaki and Tomofumi Yamamoto

ISBN: 9780128235836
PUB DATE: May 01, 2024
LIST PRICE: £155.00 / \$200.00 / €175.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 372

AUDIENCE: Nuclear engineers and researchers focusing on PWRs, PWR plant designers and operators, regulators, post graduate students of nuclear engineering, thermal energy engineers and researchers, national labs, government officials and agencies in power and energy policy and regulations.

BIC CODES: THK, KNXC, PHN, KNBN

THEMA CLASSIFICATION: THEMATHK; THEMAKNX; THEMAKNB; THEMAPHN

Guides the reader through PWR development and operation, including case studies and analysis code throughout

A Volume in the *JSME Series in Thermal and Nuclear Power Generation Series*

KEY FEATURES

- Contains contributions from the leaders and pioneers in nuclear research at the Japanese Society of Mechanical Engineers and draws upon their combined wealth of knowledge and experience
- Includes analysis codes, such as RELAP5, for the design and safety improvement of pressurized water reactors (PWRs)
- Presents history, examples, and case studies from Japan and other key regions, such as the United States and Europe

DESCRIPTION

Pressurized Water Reactors is the sixth volume in the JSME Series on Thermal and Nuclear Power Generation. In this volume, series editor Yasuo Koizumi and his volume editors, Hidehito Mimaki, Yurugi Kanzaki, and Tomofumi Yamamoto, compile all the latest research on PWRs into this comprehensive reference.

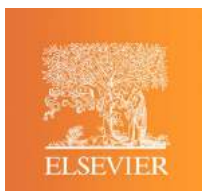
Beginning with an analysis of the history of PWR development, the reader is guided through optimum design processes for PWRs, considering safety throughout. Thermal-hydraulic aspects within the PWR system, as well as inside the reactor core, are also discussed.

This book explores the advancement and improvement of fuel and includes analysis codes for the design and safety of PWRs. The future prospects for the next generation of PWR and small modular reactors are discussed, thus providing the reader with a basis for further research of their own.

As with the other volumes in this series, this book will be an invaluable resource for nuclear and thermal engineers and researchers.



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ENGINEERING Energy

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Performance Enhancement and Control of Photovoltaic Systems



Edited by
Saad Motahhir
Mamdouh El Haj Assad

Performance Enhancement and Control of Photovoltaic Systems

Edited by : **Saad Motahhir**, Eng., PhD, Full Professor, École Nationale des Sciences Appliquées, Sidi Mohamed Ben Abdellah University, Fez, Morocco and **Mamdouh El Haj Assad**, Department of Sustainable and Renewable Energy Engineering, University of Sharjah, Sharjah, UAE

ISBN: 9780443133923
PUB DATE: May 01, 2024
LIST PRICE: £138.00 / \$180.00 /
€160.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 372

AUDIENCE: Academic: Researchers, scientists, and advanced students with an interest in photovoltaics, embedded systems, solar energy, renewable energy, power systems, and control engineering. Industry: Engineers, R&D professionals, and other industry personnel with an interest in operation and control of photovoltaics

BIC CODES: THX, UYQM, UYQ, TH, THRM

THEMA CLASSIFICATION:

THEMATHV; THEMAUYQ;

THEMATH; THEMATHY; THEMATHR

A guide to the state-of-the-art in control and performance of PV systems, covering advanced digital and embedded technologies.

KEY FEATURES

- Presents the latest materials and thermodynamic analysis techniques for improved PV performance
- Provides detailed descriptions and analyses of embedded systems and digital technologies
- Explores industrial applications that are supported by case studies and practical examples

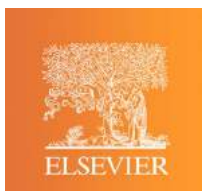
DESCRIPTION

Performance Enhancement and Control of Photovoltaic Systems brings together the latest advances in photovoltaic control and integration, with various embedded technologies applied to standalone and grid connected systems in normal and abnormal operating conditions, with new approaches intended to overcome a number of critical limitations in using PV technology. The book begins by introducing modern photovoltaic (PV) systems, system integration, materials, and thermodynamic analysis for improved performance, before examining applications in industrial processes, artificial neural network technology, and economic analysis of PV systems.

In-depth chapters then demonstrate the use of advanced control and optimization techniques, covering the use of new embedded technologies, through different applications such as MPPT controllers, solar trackers, cleaning systems, cooling systems, and monitoring systems. Applications of photovoltaic energy systems in distributed generation, microgrid, and smart grid systems will be considered.



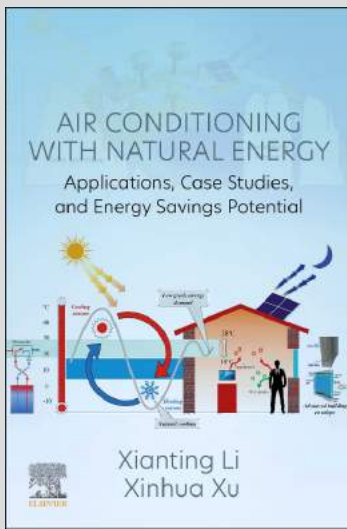
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ENGINEERING Energy

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Air Conditioning with Natural Energy

Applications, Case Studies, and Energy Savings Potential

Edited by : **Xianting Li**, Tsinghua University, China and **Xinhua Xu**, Huazhong University of Science and Technology, China

ISBN: 9780443135064
PUB DATE: May 01, 2024
LIST PRICE: £155.00 / \$200.00 / €175.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 312

AUDIENCE: Professional engineers working in the fields of thermal and mechanical engineering, HVAC, and sustainable built environment. Graduate students on courses in thermal and mechanical engineering, HVAC, and energy efficiency, and researchers in the same areas

BIC CODES: KCN, RN

THEMA CLASSIFICATION:

THEMAKCVG; THEMATQ

A comprehensive review of the principles, theory, applications, and energy saving performance of newly developed technologies for air conditioning using natural energy

KEY FEATURES

- Explains the theory and principles underpinning the latest and most important air conditioning technologies with natural energy
- Provides a new decision-making index and revised degree hours to evaluate the energy saving potential of different air conditioning technologies with natural energy, helping readers identify the most suitable air conditioning technology for any climate zone
- Analyzes the energy saving potential of different technologies from real projects in different climate zones and calculates the contribution of carbon emission reduction that can be achieved globally

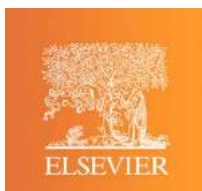
DESCRIPTION

Air Conditioning with Natural Energy: Applications, Case Studies, and Energy Savings Potential is a comprehensive examination of the principles, theory, applications, and energy saving performance of newly developed technologies for air conditioning using natural energy. Based on the latest research and real-world case studies from North America, Europe, and China, the book provides an engineering perspective on the design and application of air conditioning from multiple climates. Each case study presented analyzes the carbon emission reduction potential, energy saving potential, and the operational performance of the technologies.

Specific chapters examine the range of air conditioning technologies that use natural energy. This includes enhanced treatment technologies for outdoor air such as earth-to-air heat exchanger, fresh air pre-handling system using shallow geothermal energy, as well as newly developed technologies such as pipe-embedded wall, nocturnal cooling wall, and pipe-embedded window systems. With particular focus on applications in China, Part II provides real world case studies from multiple climatic zones, demonstrating the practical application and implementation of these technologies.



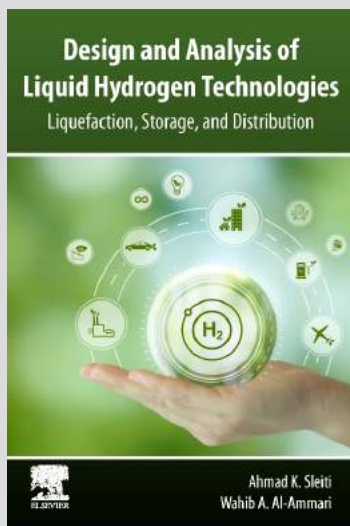
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ENGINEERING Energy

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Design and Analysis of Liquid Hydrogen Technologies

Liquefaction, Storage, and Distribution

Ahmad K. Sleiti, Department of Mechanical & Industrial Engineering, College of Engineering, Qatar University, Doha, Qatar and Wahib A. Al-Ammari, Department of Mechanical & Industrial Engineering, College of Engineering, Qatar University, Doha, Qatar

ISBN: 9780443214387
PUB DATE: May 01, 2024
LIST PRICE: £142.00 / \$185.00 / €165.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 298

AUDIENCE: Students, researchers, and scientists working on hydrogen technologies and renewable energy implementation, working in the fields of mechanical, chemical and industrial engineering. Industry practitioners involved in the processing, design, manufacturing, quality control, reliability, safety, systems, and tests of cryogenic refrigeration and liquid hydrogen production, storage, and transportation

BIC CODES: THX

THEMA CLASSIFICATION: THEMATHV

A complete resource on liquid hydrogen technologies, their fundamental theoretical framework, advanced design and analyses methodologies

KEY FEATURES

- Describes, in detail, the current operational and conceptual hydrogen liquefaction, storage, transportation, regasification, and distribution technologies
- Offers comprehensive analytical tools, decision-making tools, and practical examples for the advanced modeling and simulation of liquid hydrogen plants
- Provides techno-economic, reliability, safety, and environmental impact analysis of liquid hydrogen technologies, along with future prospects

DESCRIPTION

Design and Analysis of Liquid Hydrogen Technologies: Liquefaction, Storage and Distribution offers readers a comprehensive guide to the development, analysis, design, and assessment methodologies for liquid hydrogen. From the fundamentals to the latest developments and current applications, the book provides an extensive and systematic discussion of the design, simulation, and techno-economic analysis methodologies that is supported by practical examples, verified codes, and innovative process designs. The book provides a comprehensive overview of the liquid hydrogen economy that is followed by advanced thermoeconomic, exergoeconomic, optimization, and dynamic simulation models that are essential for current and future LH2 technologies.

Readers will find this to be a valuable resource for students, researchers, scientists, and engineers working in the hydrogen economy or involved in the processing, design, manufacturing, quality control, reliability, safety, systems, and testing of cryogenic refrigeration and liquid hydrogen production, storage, and transportation.



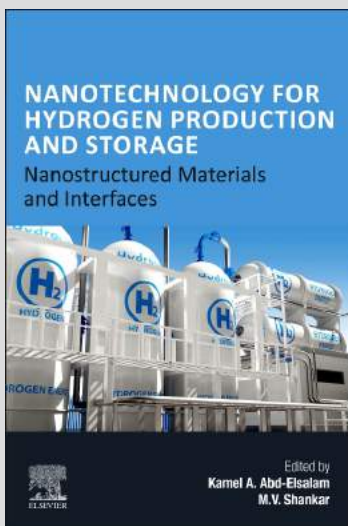
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Nanotechnology for Hydrogen Production and Storage

Nanostructured Materials and Interfaces

Edited by : **Kamel A. Abd-Elsalam**, Research Professor at the Plant Pathology Research Institute, Agricultural Research Center, Giza, Egypt and **M.V. Shankar**, Yogi Vemana University, Kadapa, Andhra Pradesh, India.

ISBN: 9780443214561
PUB DATE: May 01, 2024
LIST PRICE: £155.00 / \$200.00 / €175.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 614

AUDIENCE: Student and researchers working in renewable energy and interested in the production and storage of hydrogen. Environmental engineers, materials scientists, and biotechnologists interested in renewable energy applications

BIC CODES: PHH

THEMA CLASSIFICATION: THEMAPHH

Presents the engineering aspects and practical applications of hydrogen production and storage using nanomaterials

KEY FEATURES

- Synthesizes the latest advances in the field of nanoparticles for hydrogen production and storage, including new methods and industry applications
- Explains various methods for the design of nanomaterials for hydrogen production and storage
- Identifies the strengths and weaknesses of different nanomaterials and approaches
- Explores hydrogen production via photocatalytic, electrocatalytic, and biological processes

DESCRIPTION

Nanotechnology for Hydrogen Production and Storage: Nanostructured Materials and Interfaces presents an evaluation of the various nano-based systems for hydrogen generation and storage. With a focus on challenges and recent developments, the book analyzes nanomaterials with the potential to boost hydrogen production and improve storage. It assesses the potential improvements to industrially important hydrogen production technologies by way of better surface-interface control through nanostructures of strategic composites of metal oxides, metal chalcogenides, plasmonic metals, conducting polymers, carbonaceous materials, and bio-interfaces with different types of algae and bacteria.

In addition, the efficiency of various photochemical water splitting processes to generate renewable hydrogen energy are reviewed, with a focus on natural water splitting via photosynthesis, and the use of various metallic and non-metallic nanomaterials in anthropogenic/artificial water splitting processes is analyzed. Finally, the potential of nanomaterials in enhancing hydrogen generation in dark- and photo-fermentative organisms is explored, along with various nano-based systems for hydrogen generation and associated significant challenges and advances in biohydrogen research and development.



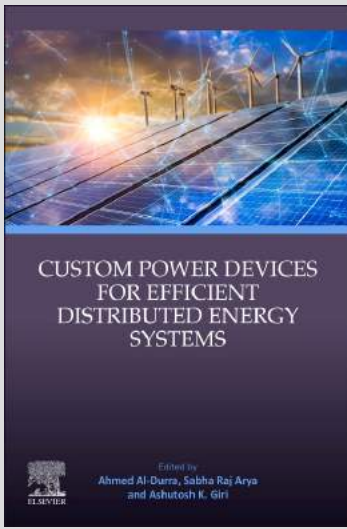
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Custom Power Devices for Efficient Distributed Energy Systems

Edited by : **Ahmed Al-Durra**, Professor, Electrical Engineering and Computer Science Department, Khalifa University; **Sabha Raj Arya**, Associate Professor, Department of Electrical Engineering, Sardar Vallabhbhai National Institute of Technology and **Ashutosh K. Giri**, Assistant Professor, Electrical Engineering Department, Government Engineering College

ISBN: 9780443214912
PUB DATE: May 01, 2024
LIST PRICE: £130.00 / \$170.00 / €148.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 279

AUDIENCE: Academia: Advanced students, researchers, and faculty, with an interest in power generation systems, renewable energy, power systems engineering, and grid integration. Industry: Practicing engineers, R&D professionals, managers, and other industry personnel in the renewable energy sector

BIC CODES: TH, THRM, THX, KNB

THEMA CLASSIFICATION:

THEMATH; THEMATHR;

THEMATHY; THEMATHV;

THEMAKNB

A state-of-the-art, practical guide to custom power devices for efficient distributed energy systems, focusing on renewable energy sources

KEY FEATURES

- Covers established as well as advanced control algorithms for the operation of custom power devices
- Extensively explains circuit design and its testing for solar and wind-based energy conversion systems
- Includes simulation results and mathematical modeling of control algorithms
- Presents applications of converter topologies in solar, wind, hydro, and other power generation systems

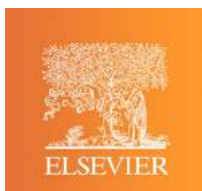
DESCRIPTION

Custom Power Devices for Efficient Distributed Energy Systems presents a range of novel ideas and concepts based on renewable energy-fed power generation and control, offering avenues to efficient utilization and improved power quality and addressing power quality issues such as harmonics compensation, supply current balancing, and neutral current compensation. The book begins by introducing distributed power systems within the global renewable energy context, reviewing different types of renewable energy sources and distributed power generation systems, and detailing custom power device design and modeling.

This is followed by individual chapters, providing in-depth coverage of specific techniques and applications with insights into various topologies, as well as control algorithms, used for power control in a range of distributed energy conversion systems, such as solar, wind, hydro, and other power sources. Finally, power quality issues in renewable energy distributed generation are discussed and addressed in detail. This is a valuable resource for researchers, faculty, and advanced students with an interest in power generation systems, renewable energy, and power systems engineering, as well as practicing engineers, R&D professionals, managers, and other industry personnel in the renewable energy sector.



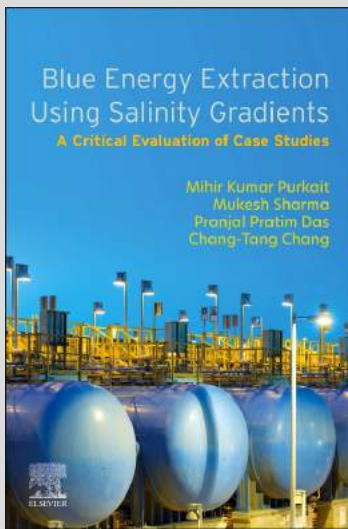
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ENGINEERING Electrical

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Blue Energy Extraction Using Salinity Gradients

A Critical Evaluation of Case Studies

Mihir Kumar Purkait, PhD, Professor, Department of Chemical Engineering, Indian Institute of Technology, Guwahati, India; **Mukesh Sharma**, Research Fellow, Department of Chemical Engineering, Indian Institute of Technology, Guwahati, India; **Pranjal Pratim Das**, Research Scientist, Department of Chemical Engineering, Indian Institute of Technology, Guwahati, India and **Chang-Tang Chang**, Chair Professor and Director, National Ilan University, Taiwan.

ISBN: 9780443216121
PUB DATE: May 01, 2024
LIST PRICE: £142.00 / \$185.00 / €165.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 232

AUDIENCE: Students, researchers, and practicing engineers and professionals working in the area of sustainable/renewable energy extraction from the oceans, Disciples include civil, chemical, and environmental engineers, materials scientists, and coastal and ocean engineers with interests in energy applications

BIC CODES: THX, TDCB

THEMA CLASSIFICATION:

THEMATHV; THEMATDC

Deals with the premier, progress, and prospects of blue energy with validated mathematical models and case studies

KEY FEATURES

- Reviews the latest technologies, progress, and developments in sustainable energy generation using salinity gradients
- Provides real-world case studies from working power stations around the globe, focusing on the practical challenges that are faced by their implementation
- Critically evaluates the potential for energy generation using salinity gradients, which regions yield the greatest potential, and supports this understanding with mathematical models
- includes examples of full-scale osmotic power extraction

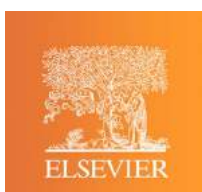
DESCRIPTION

Blue Energy Extraction Using Salinity Gradients: A Critical Evaluation of Case Studies presents a collection of case studies on real-world power plants from around the world that involve sustainable energy extraction via salinity gradients. Using real-world examples, the book explains and demonstrates the fundamentals, technologies, processes, and application of salinity gradient energy extraction methods, while also offering practical solutions. The book provides an overview of the fundamentals and technologies of salinity gradient energy, with each chapter analyzing a real-world salinity gradient power plant from a different region of the world. Examples from developed and developing economies on three continents are covered.

For each case study, key aspects of performance are evaluated, and benefits and operational challenges are discussed. Validated mathematical models are also included to improve readers understanding of how to control operating parameters.



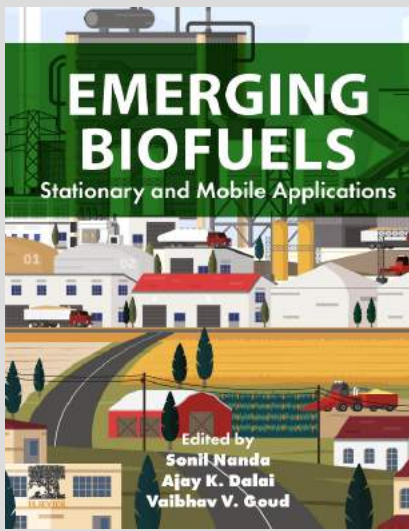
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Emerging Biofuels

Stationary and Mobile Applications

Edited by : **Sonil Nanda**, Research Associate, Department of Chemical and Biological Engineering, University of Saskatchewan, Saskatoon, Saskatchewan, Canada; **Vaibhav Vasant Goud**, Professor, Department of Chemical Engineering, Indian Institute of Technology Guwahati, Assam, India; **Ajay K. Dalai**, Professor and Canada Research Chair in Bioenergy and Environmentally Friendly Chemical Processing and Professor, Department of Chemical and Biological Engineering, College of Engineering, University of Saskatchewan, SK Canada

ISBN: 9780323995474
PUB DATE: Mar 29, 2024
LIST PRICE: £142.00 / \$175.00 / €170.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 238

AUDIENCE: Students and researchers involved in biofuels production and working in the areas of Chemical/Process engineering, Environmental Science, and Biotechnology, Engineers involved in the commercialization of biofuels, particularly in the transportation sector such as the automotive and aviation industries, Students in courses on Renewable Energy and Bioenergy
BIC CODES: PHH, KCN, RN
THEMA CLASSIFICATION: THEMAPHH; THEMAKCVG; THEMATQ

Characterizes the supply chains and conversion pathways of the most promising biofuels of the 21st century

KEY FEATURES

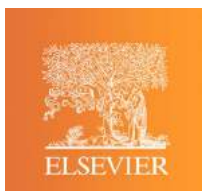
- Brings together the fundamentals and latest developments on emerging biofuels
- Provides a comparative assessment of biofuels and alternative conversion pathways
- Offers a holistic assessment of biomass supply chains for guided sustainability analysis and informed decision-making

DESCRIPTION

Emerging Biofuels: Stationary and Mobile Applications presents a comprehensive assessment of supply chains and conversion pathways of the promising biofuels in the 21st century. Highlighting the potential of emerging biofuels, the book covers the latest breakthroughs and process intensification strategies for the development of near to mid-term commercialization. Chapters provide readers with an overview of emerging biofuels, key advantages, and major drivers for the biofuel industry. The majority of the book is dedicated to assessing each emerging biofuel, including renewable diesel, bio-CNG, 3rd generation lignocellulosic ethanol, fisher-tropsch biofuels, biohydrogen, microalgal biodiesel, bio jet fuel, hythane, methanol, and bio-oil, dimethyl ether, and more. The final chapters of the book examine techno-economic viability, sustainability, and the lifecycle of selected biofuel through detailed case studies while also analyzing international policy frameworks for biofuels. This book is a valuable reference for students, researchers and industry engineers involved in biofuels production, but will also be of interest to multidisciplinary teams working across Renewable Energy, Chemical Engineering, Environmental Science and Sustainability Science.



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Fast and Effective Embedded Systems Design, 3e

From bits and bytes to IoT, with the Arm Mbed

Tim Wilmshurst, Freelance technical author and educator; **Rob Toulson**, Professor of Creative Industries at the University of Westminster, London, UK. and **Tom Spink**, Computer Science Department, University of St Andrews, Scotland

ISBN: 9780323951975

PREVIOUS ISBN: 9780081008805

PUB DATE: Jul 24, 2024

LIST PRICE: £64.95 / \$84.95 / €73.95

DISCOUNT: Textbook

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 521

AUDIENCE: Undergraduate students studying embedded systems using ARM technology/ Navstem estimated total annual US enrollment for embedded systems design courses in 2020 at 11,900 students, up 1% from the prior year. The market is quite segmented into more general embedded systems texts like our own *Computers as Components* by Marilyn Wolf and texts focusing on design using a specific technology, such as Toulson and Wilmshurst. Professional embedded systems engineers, and software engineers developing embedded systems.

BIC CODES: TGB

THEMA CLASSIFICATION:
THEMATGB

Helps readers understand and apply the key aspects of embedded systems using the ARM mbed platform and operating system for internet-connected devices

KEY FEATURES

- Provides a hands-on introduction to the field of embedded systems, covering key concepts through simple and effective experimentation
- Features a wide range of coverage, from simple digital input/output to advanced networking and intelligent instrumentation
- Includes a new chapter on the Real-Time Operating System, with numerous examples
- Introduces two new chapters on the Internet of Things, with a major example project linking sensors through to the cloud
- Presents in-depth exploration of internal microcontroller features, leading to an understanding of configuration options and power supply optimization

DESCRIPTION

Fast and Effective Embedded Systems Design, Third Edition is a fast-moving introduction to embedded systems design, applying the innovative Arm mbed "ecosystem," including both hardware components and its web-based development environment. Minimal background knowledge is needed to start. Each chapter introduces a major topic in embedded systems and proceeds as a series of practical experiments. A "learning through doing" strategy is adopted, with the underlying theory being introduced alongside. C/C++ programming is applied, with a step-by-step approach which allows you to get coding quickly. Once the basics are covered, the book progresses to some hot embedded topics – intelligent instrumentation, Bluetooth LE, Zigbee, real-time programming, and the Internet of Things.

In this new edition all code is refreshed to match the new mbed operating system, and much new code is introduced. The principles of real-time operating systems are explained, and the capabilities of the mbed RTOS are clearly demonstrated. This third edition will readily form the basis of introductory and intermediate university or college courses in embedded systems.



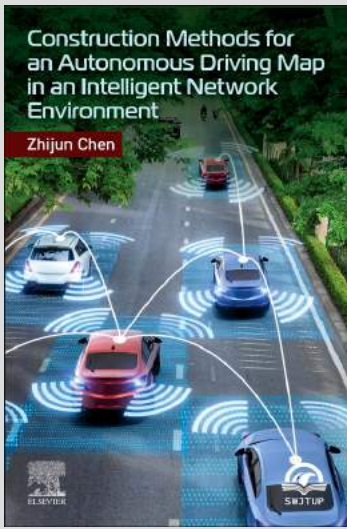
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Construction Methods for an Autonomous Driving Map in an Intelligent Network Environment

Zhijun Chen, Deputy Director, Institute of Traffic Information and Intelligent Systems, Intelligent Transportation Systems Research Center, Wuhan University of Technology, China

ISBN: 9780443273162
PUB DATE: May 02, 2024
LIST PRICE: £137.99 / \$170.00 / €158.99

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 158

AUDIENCE: Researchers involved in autonomous driving, traffic planning, traffic engineering, traffic control and traffic management

BIC CODES: UYQ, TRC

THEMA CLASSIFICATION:

THEMAUYQ; THEMATRC

Provides an overview of the construction and development of Autonomous Driving Maps as part of the move towards autonomous driving technology

KEY FEATURES

An Autonomous Driving Map is used for optimization of not only for a single vehicle, but also for the *entire* traffic system.

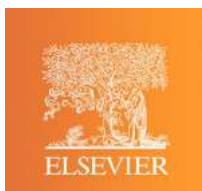
DESCRIPTION

Construction Methods for an Autonomous Driving Map in an Intelligent Network Environment not only supports the development of Intelligent & Connected Transportation, but also promotes the landing application of autonomous driving. Areas covered include the fusion target perception method based on vehicle vision and millimeter wave radar, cross-field of view object perception method, vehicle motion recognition method based on vehicle road fusion information, vehicle trajectory prediction method based on improved hybrid neural network and driving map construction driven by road perception fusion are introduced in this book.

Benefiting from the development of computer technique, the advanced machine learning and artificial intelligence theories are used by this book to show readers the construction process of the Autonomous Driving Map.



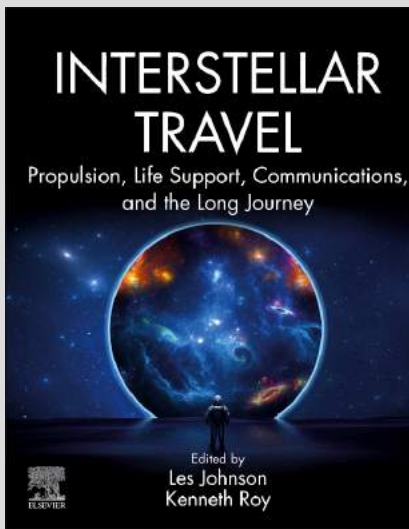
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ENGINEERING Automotive & Aeronautical

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Interstellar Travel

Propulsion, Life Support, Communications, and the Long Journey

Edited by : **Les Johnson**, Physicist and NASA Technologist, NASA Science and Tech Office, George C. Marshall Space Flight Center, The Interstellar Research Group, Oak Ridge, USA and **Kenneth Roy**, Formerly Founding member and Engineer, Tennessee Valley, The Interstellar Research Group, Oak Ridge, USA

ISBN: 9780323912808
PUB DATE: May 01, 2024
LIST PRICE: £138.00 / \$170.00 / €165.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 279

AUDIENCE: Aerospace engineers, researchers, scientists and academics working on or interested in space development and space technology, especially interstellar travel

BIC CODES: TGMF1, TRP

THEMA CLASSIFICATION: THEMATRP; THEMAPHDF; THEMATGMF

Addresses the technical challenges and issues of interstellar travel

KEY FEATURES

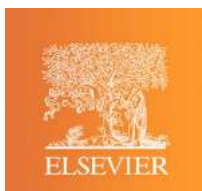
- Discusses the technical challenges that must be overcome to mount interstellar missions
- Features various aspects of interstellar travel by the world's recognized leading experts in the field
- Provides referenceable data and analysis for both new and experienced researchers in the interstellar and deep-space exploration fields

DESCRIPTION

Interstellar Travel: Propulsion, Life Support, Communications, and the Long Journey addresses the technical challenges that must be overcome to make such journeys possible. Leading experts in the fields of space propulsion, power, communication, navigation, crew selection, safety and health provide detailed information about state-of-the-art technologies and approaches for each challenge, along with possible methods based on real science and engineering. This book offers in-depth, up-to-date and realistic technical and scientific considerations in the pursuit of interstellar travel and will be an essential reference for scientists, engineers, researchers and academics working on, or interested in, space development and space technologies. With a renewed interest in space exploration and development evidenced by the rise of the commercial space sector and various governments now planning to send humans back to the moon and to Mars, there is also growing interest in taking the next steps beyond the solar system and to the ultimate destination – planets circling other stars. With the rapid growth in the number of known exoplanets, people are now asking how we might make journeys to visit them.



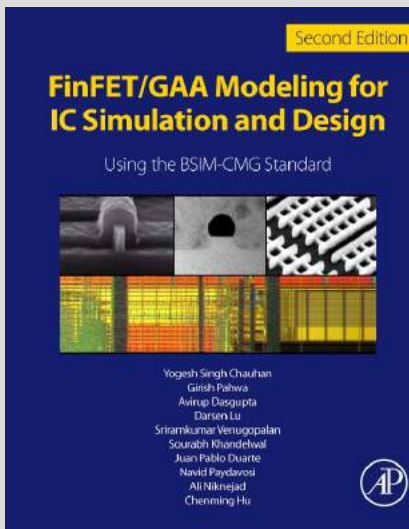
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FinFET/GAA Modeling for IC Simulation and Design, 2e

Using the BSIM-CMG Standard

Yogesh Singh Chauhan, Professor, Department of Electrical Engineering, Indian Institute of Technology Kanpur, India; **Girish Pahwa**, Assistant Professional Researcher, Department of Electrical Engineering and Computer Sciences, University of California Berkeley, Berkeley, CA, USA; **Avirup Dasgupta**, Assistant Professor, Dept. of Electronics and Communication Engineering, Indian Institute of Technology - Roorkee, India; **Darsen Lu**, Associate Professor, Dept. of Electrical Engineering, National Cheng Kung University, Tainan City, Taiwan; **Sriramkumar Vanugopalan**, Skyworks Solutions, CA, USA; **Sourabh Khandelwal**, Associate Professor, Macquarie University, Sydney, Australia; **Juan Pablo Duarte**, University of California, Berkeley, USA;

ISBN: 9780323957298

PREVIOUS ISBN: 9780124200319

PUB DATE: May 01, 2024

LIST PRICE: £99.95 / \$130.00 /

€113.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 327

AUDIENCE: Device modelers, circuit designers, graduate students in electronic engineering

BIC CODES: TNC

THEMA CLASSIFICATION:

THEMATNC

A complete update to this reference on FinFET/GAA and the BSIM-CMG Standard

KEY FEATURES

- Authored by the lead inventor and developer of FinFET and developers of the BSIM-CM standard model, providing an experts' insight into the specifications of the standard
- Presents the first book on the industry-standard FinFET model - BSIM-CMG
- Includes a new chapter that provides a comprehensive introduction to GAA, including motivations, device concepts, structure, fabrication steps, benefits, and the industry standard GAA model
- Covers the recent developments in the BSIM-CMG model
- Updates on RF modeling of FinFET using BSIM-CMG model, including parameter extraction

DESCRIPTION

FinFET/GAA Modeling for IC Simulation and Design: Using the BSIM-CMG Standard, Second Edition is the first to book to explain FinFET modeling for IC simulation and the industry standard – BSIM-CMG - describing the rush in demand for advancing the technology from planar to 3D architecture as now enabled by the approved industry standard. The book gives a strong foundation on the physics and operation of FinFET, details aspects of the BSIM-CMG model such as surface potential, charge and current calculations, and includes a dedicated chapter on parameter extraction procedures, thus providing a step-by-step approach for the efficient extraction of model parameters.

With this book, users will learn Why you should use FinFET, The physics and operation of FinFET Details of the FinFET standard model (BSIM-CMG), Parameter extraction in BSIM-CMG FinFET circuit design and simulation, and more.



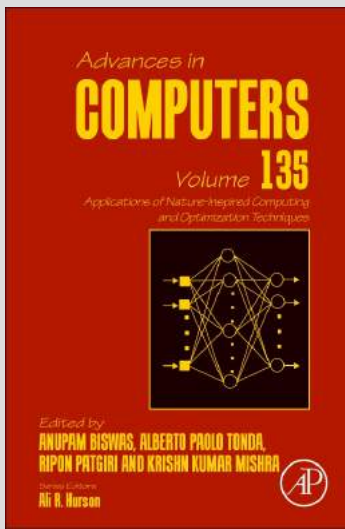
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ENGINEERING Electrical

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Applications of Nature-Inspired Computing and Optimization Techniques, Vol 135

Edited by : **Anupam Biswas**, Assistant Professor, Computer Science and Engineering, National Institute of Technology Silchar, Silchar, Assam, India; **Alberto Paolo Tonda**; **Ripon Patgiri**, Assistant Professor, Department of Computer Science and Engineering, National Institute of Technology, Silchar, India and **Krishn Kumar Mishra**

ISBN: 9780323957687
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LIST PRICE: £126.00 / \$182.00 / €130.00
DISCOUNT: Serial
FORMAT: Hardback
TRIM: 6.00w x 9.00h
PAGES: c. 392
AUDIENCE: Researchers, academicians and PhD students
BIC CODES: PB, UMZ
THEMA CLASSIFICATION: THEMABP; THEMAUM

Application specific studies covering nuts and bolts of nature-inspired optimization techniques

KEY FEATURES

- Includes algorithm specific studies that cover basic introduction and analysis of key components of algorithms, such as convergence, solution accuracy, computational costs, tuning, and control of parameters
- Comprises some of the major applications of different domains
- Presents application specific studies, incorporating ways of designing objective functions, solution representation, and constraint handling

DESCRIPTION

Advances in Computers, Volume 135 highlights advances in the field, with this new volume, Applications of Nature-inspired Computing and Optimization Techniques presenting interesting chapters on a variety of timely topics, including A Brief Introduction to Nature-inspired Computing, Optimization and Applications, Overview of Non-linear Interval Optimization Problems, Solving the Aircraft Landing Problem using the Bee Colony Optimization (BCO) Algorithm, Situation-based Genetic Network Programming to Solve Agent Control Problems, Small Signal Stability Enhancement of Large Interconnected Power System using Grasshopper Optimization Algorithm Tuned Power System Stabilizer, Air Quality Modelling for Smart Cities of India by Nature Inspired AI – A Sustainable Approach, and much more.

Other sections cover Genetic Algorithm for the Optimization of Infectiological Parameter Values under Different Nutritional Status, A Novel Influencer Mutation Strategy for Nature-inspired Optimization Algorithms to Solve Electricity Price Forecasting Problem, Recent Trends in Human and Bio Inspired Computing: Use Case Study from Retail Perspective, Domain Knowledge Enriched Summarization of Legal Judgment Documents via Grey Wolf Optimization, and a host of other topics.



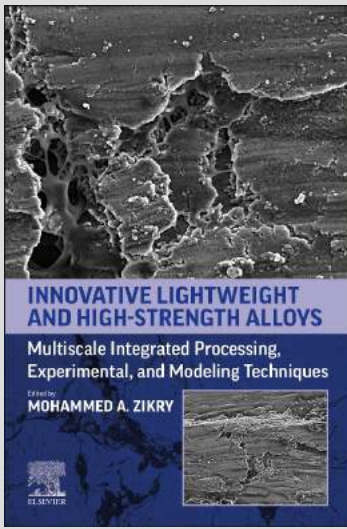
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SERIALS Computer Science

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Innovative Lightweight and High-Strength Alloys

Multiscale Integrated Processing, Experimental, and Modeling Techniques

Edited by : **Mohammed A. Zikry**, Professor, Department of Mechanical/Aerospace Engineering, North Carolina State University, Raleigh, North Carolina, USA

ISBN: 9780323995399
PUB DATE: May 01, 2024
LIST PRICE: £185.00 / \$240.00 / €210.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 465
AUDIENCE: Academic researchers, materials researchers, mechanical engineering researchers, and professional engineers in mechanics, materials science, and chemistry, Advanced undergrad and graduate students
BIC CODES: TDM
THEMA CLASSIFICATION: THEMATDPM

Provides processing, experimental, characterization and modeling techniques, demonstrating how to design new alloys, improve properties and avoid roadblocks

KEY FEATURES

- Provides solutions for designing innovative and durable alloys
- Demonstrates how to optimally combine alloys with other metallic and non-metallic material systems for longer life cycles and better durability in extreme environments and loading conditions
- Outlines a variety of experimentation, characterization and modeling techniques that can be put into immediate practice

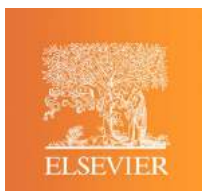
DESCRIPTION

Innovative Lightweight and High-Strength Alloys: Multiscale Integrated Processing, Experimental, and Modeling Techniques provides multiscale processing, experimental, and modeling techniques, overviews and perspectives, which highlight current roadblocks to the optimal design of new alloys, and provides viable solutions. Critical microstructural, chemical and mechanical aspects are considered with techniques for significantly improving mechanical properties. Case studies, applications and hands-on techniques that can be put into immediate practice are included throughout. Sections cover processing techniques for various alloys, including aluminum, titanium, martensitic, austenitic, and others. Additive manufacturing of alloys is also covered, along with updates on mechanical quasi-static, chemically-based, and dynamic experimental approaches.

The book concludes with a modeling section that features several chapters covering multiscale, microstructural, combinatorial computational, and machine learning modeling techniques. It is a key resource for academic researchers, materials researchers, mechanical engineering researchers, and professional engineers in mechanics, materials science, and chemistry.



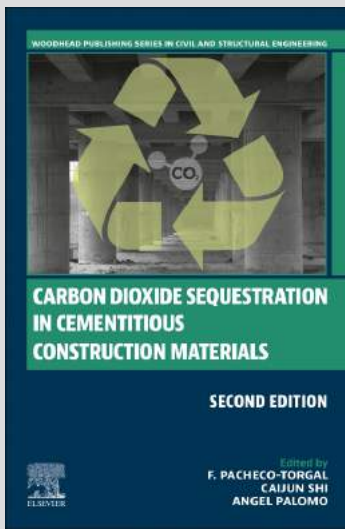
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ENGINEERING Mechanical

<https://virtuale.elsevier.com>, www.elsevier.com

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Carbon Dioxide Sequestration in Cementitious Construction Materials, 2e

Edited by : **F. Pacheco-Torgal**, C-TAC Research Centre, University of Minho, Guimaraes, Portugal; **Caijun Shi**, Hunan University, China and **Angel Palomo**, Instituto de Ciencias de la Construcción Eduardo Torroja, CSIC, Spain

ISBN: 9780443135774

PREVIOUS ISBN: 9780081024447

PUB DATE: May 01, 2024

LIST PRICE: £205.00 / \$255.99 / €236.99

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 549

AUDIENCE: Academic and industrial researchers, materials scientists, chemists and civil engineers, construction professionals and manufacturers working on the development of low-carbon building materials. Postgraduate students in all the above disciplines and environmental sciences

BIC CODES: TGM, TNKX, TN

THEMA CLASSIFICATION:

THEMAAMC; THEMATGM;

THEMATN

An updated reference on recent research developments on cementitious construction materials based on carbon dioxide storage

A Volume in the *Woodhead Publishing Series in Civil and Structural Engineering Series*

KEY FEATURES

- Promotes the importance of CO₂ storage in carbonation of construction materials, especially reincorporation of CO₂ during fabrication
- Discusses a wide range of cementitious materials with CO₂ storage capabilities
- Features redesign of cementation mechanisms to utilize CO₂ during fabrication
- Covers biosequestration

DESCRIPTION

Carbon Dioxide Sequestration in Cementitious Construction Materials, Second Edition follows on the success of the previous edition and provides an up-to-date review on recent research developments on cementitious construction materials based on carbon dioxide storage. Brand new chapters are included on carbonation methods, such as carbon sequestration of cement pastes during pressurized CO₂ curing; carbon dioxide sequestration of low-calcium fly ash via direct aqueous carbonation; increasing the efficiency of carbon dioxide sequestration through high temperature carbonation; and carbon sequestration in engineered cementitious composites.

There are also several new case studies on sequestration of industrial wastes, which include carbon dioxide sequestration by direct mineralization of fly ash; the effect of direct carbonation routes of basic oxygen furnace slag on strength and hydration of blended cement paste; carbon sequestration of mine waste and utilization as a supplementary cementitious material; and carbon dioxide sequestration on masonry blocks based on industrial wastes.



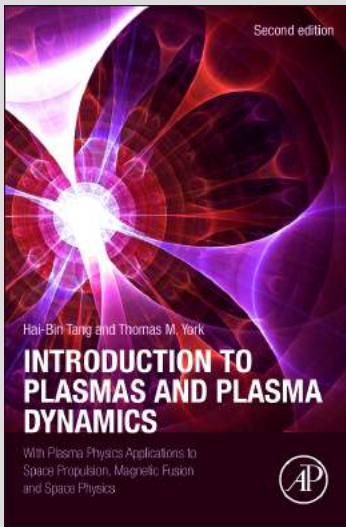
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Introduction to Plasmas and Plasma Dynamics, 2e

With Plasma Physics Applications to Space Propulsion, Magnetic Fusion and Space Physics

Hai-Bin Tang, Deputy Director, Department of Aerospace Propulsion School of Astronautics, Beihang University, China

ISBN: 9780443136993

PREVIOUS ISBN: 9780128016619

PUB DATE: May 01, 2024

LIST PRICE: £138.00 / \$180.00 / €160.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 400

AUDIENCE: Engineers and researchers in aerospace engineering and other subjects related to plasma physics

BIC CODES: TGB

THEMA CLASSIFICATION:
THEMATGB

Accessible introduction to the understanding of high temperature, ionized gases necessary to conduct research and develop applications related to plasmas

KEY FEATURES

- Describes plasma applications with close reference to elementary processes, promoting a deeper understanding of plasmas in new fields
- Provides structured problems in every chapter that help readers grasp the book's practical lessons
- Includes a new chapter on numerical methods in plasmas that adds crucial context for experimental approaches

DESCRIPTION

Introduction to Plasmas and Plasma Dynamics: With Plasma Physics Applications to Space Propulsion, Second Edition provides an accessible introduction to the understanding of the high temperature, ionized gases necessary to conduct research and develop applications related to plasmas. Thoroughly updated and expanded, this second edition is also amended for greater ease of use with the inclusion of self-study problems. New chapters addressing numerical methods in plasmas, the kinetic description and analysis of plasma, and the chemistry of the ionosphere open up this subject to a broader range of readers.

Starting with the essential theory, this book goes on to describe relevant devices and mechanisms, before presenting a clear outline of the analysis and numerical details of plasma. The latest trends, concepts, and applications in plasma engineering are also addressed, including plasma formation and magnetic fusion, plasma thrusters and space propulsion.



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Reuse of Plastic Waste in Eco-efficient Concrete

Edited by : **Fernando Pacheco-Torgal**, Principal Investigator, CTAC Research Centre, University of Minho, Guimaraes, Portugal.; **Jamal Khatib**, Professor of Civil Engineering at the Beirut Arab University, Faculty of Science and Engineering, University of Wolverhampton, Wolverhampton, UK; **Francesco Colangelo**, Department of Engineering University Parthenope of Naples Research Unit Parthenope - INSTM - National Interuniversity Consortium of Materials Science and Technology Centro Direzionale, Isola Naples, Italy. and **Rabin Tuladhar**, Associate Professor and Head of Engineering in the College of Science and Engineering, James Cook University, Australia.

ISBN: 9780443137983
PUB DATE: May 01, 2024
LIST PRICE: £195.00 / \$310.00 / €270.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 604

AUDIENCE: Academic and industrial researchers who are working with waste materials and the use of recycled plastics in concrete, civil and structural engineers, polymer production technologists, practicing engineers in the construction industry, and concrete manufacturers, Postgraduate students in materials science and civil and environmental engineering, government regulatory agencies

BIC CODES: TGM, TN
THEMA CLASSIFICATION: THEMATGM; THEMATN

Provides state-of-the art knowledge on the properties of conventional concrete reinforced with waste and recycled plastics

A Volume in the *Woodhead Publishing Series in Civil and Structural Engineering Series*

KEY FEATURES

- Describes the main types of recycled plastics that can be applied in concrete manufacturing
- Presents, state-of-the art knowledge on the properties of conventional concrete with recycled plastics
- Discusses the technological challenges for concrete manufacturers for mass production of recycled concrete from plastic waste
- Covers lifecycle cost analysis, production challenges, and long-term performance analysis

DESCRIPTION

Reuse of Plastic Waste in Eco-efficient Concrete presents the latest research findings on the application and use of recycled plastic waste in sustainable construction. Divided over four parts, the book's chapters cover various techniques for processing and separation of plastic wastes; use of recycled plastics as aggregates in modified concrete; as well as lightweight reinforced concrete applications too. There is also an entire section dedicated to asphalt mixtures. It also provides technological solutions on how recycled plastic wastes can be applied in concrete manufacturing.

This will be a valuable reference source for academic and industrial researchers who are working with waste materials and the use of recycled plastics in concrete, as well as for civil and structural engineers, polymer production technologists, and concrete manufacturers.



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Securing Next-Generation Connected Healthcare Systems

Artificial Intelligence Technologies

Edited by : **Deepak Gupta**, PhD, Assistant Professor, Department of Computer Science and Engineering, Maharaja Agrasen Institute of Technology, Delhi, India and **Aboul Ella Hassanien**, Professor of Information Technology, Faculty of Computer and Information, Cairo University, Cairo, Egypt

ISBN: 9780443139512
PUB DATE: May 01, 2024
LIST PRICE: £138.00 / \$180.00 / €160.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 279

AUDIENCE: Undergraduate and graduate levels, researchers, data scientists, and professionals interested in the application of artificial intelligence in healthcare management, data security of connected healthcare systems and related fields, specifically on data intensive secured systems and computing environments, IoT for communication, data security, and trust management

BIC CODES: UYQE, UYQ, UMB, PBD

THEMA CLASSIFICATION:
THEMAUYQ; THEMAUYQE;
THEMAUMB; THEMABPD;
THEMAKJ; THEMAUFL

Explores IoT and Edge technologies in next generation connected healthcare systems and security

KEY FEATURES

- Covers the latest next generation connected healthcare technologies using parallel computing
- Presents all the security aspects in next-generation technologies for healthcare
- Utilizes technologies such as blockchain and its integration with IoT for communication, data security, and trust management
- Discusses privacy and security issues and challenges in data intensive cloud computing environment
- Dives into the concept of parallel and distributed computing technologies and their applications in the real world

DESCRIPTION

Securing Next-Generation Connected Healthcare Systems: Artificial Intelligence Technologies focuses on the crucial aspects of IoT security in a connected environment, which will not only benefit from cutting-edge methodological approaches but also assist in the rapid scalability and improvement of these systems. This book shows how to utilize technologies like blockchain and its integration with IoT for communication, data security, and trust management. It introduces the security aspect of next generation technologies for healthcare, covering a wide range of security and computing methodologies.

Researchers, data scientists, students, and professionals interested in the application of artificial intelligence in healthcare management, data security of connected healthcare systems and related fields, specifically on data intensive secured systems and computing environments, will find this to be a welcomed resource.



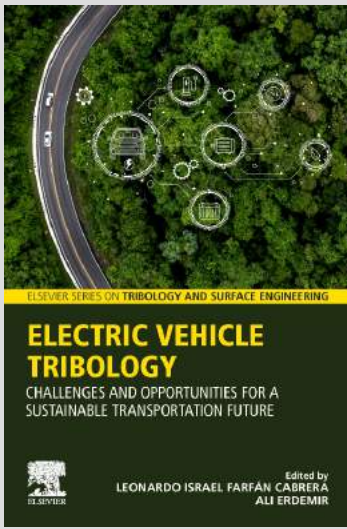
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Electric Vehicle Tribology

Challenges and Opportunities for a Sustainable Transportation Future

Edited by : **Leonardo Israel Farfan Cabrera**, Assistant Professor, Automotive and Mechanical Engineering, Tecnológico de Monterrey, Monterrey, México. and **Ali Erdemir**, Professor, Halliburton Chair, Mechanical Engineering, Texas A&M University, Texas, USA.

ISBN: 9780443140747
PUB DATE: May 01, 2024
LIST PRICE: £142.00 / \$185.00 / €165.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 232
AUDIENCE: Scientists, engineers, and practitioners involved in Research and Development, design, manufacturing, or service of electric vehicles. Undergraduate and graduate students, and academic researchers in electric vehicles
BIC CODES: TRC
THEMA CLASSIFICATION: THEMATRC

Provides comprehensive grounding in the unique needs of electric vehicles to achieve sustainable tribology in transport systems

A Volume in the *Elsevier Series on Tribology and Surface Engineering Series*

KEY FEATURES

- Provides a thorough grounding in this multidisciplinary topic, building from EV and tribology basics to complex practical uses
- Outlines case studies and testing protocols for engineers, students, and researchers
- Evaluates the latest opportunities in green EV tribology for a sustainable transport future

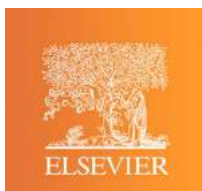
DESCRIPTION

Electric Vehicle Tribology: Challenges and Opportunities for a Sustainable Transportation Future provides practical, comprehensive guidance on a new and increasingly important area of tribology. Building skills from fundamentals to solution design, this book demonstrates the unique tribological techniques essential to the efficient electrification of transport systems. Led by Professors with a combined three decades in industry and academia, and collecting insights from experts around the world, this book begins with the essential knowledge regarding both Electric Vehicles and tribology.

After outlining the unique tribological needs of EVs, the book then breaks down the components and hardware required. It provides detailed protocols and methods for the testing and improvement of lubricants and materials, as well as a dedicated section on modern lubrication specific to EVs. Throughout, it considers the critical question of sustainable tribology, and the long-term sustainable options for lubrication and materials for electric vehicles.



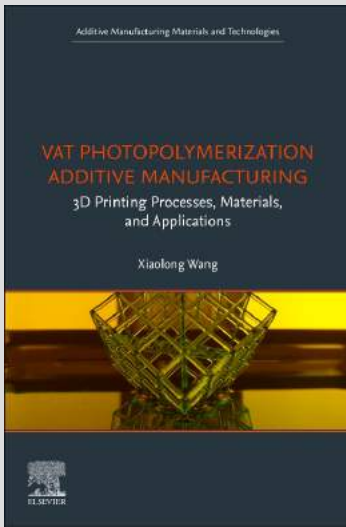
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Vat Photopolymerization Additive Manufacturing

3D Printing Processes, Materials, and Applications

Edited by : **Xiaolong Wang**, Full Professor, Chinese Academy of Sciences' Lanzhou Institute of Chemical Physics (LICP), Chinese Academy of Sciences (CAS), China

ISBN: 9780443154874
PUB DATE: May 01, 2024
LIST PRICE: £185.00 / \$240.00 / €210.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 460
AUDIENCE: Professors, academic researchers, engineers, chemist, educator, military institute R & D personnel of the enterprise, Science and Technology Management Department, defense engineer
BIC CODES: TGM
THEMA CLASSIFICATION: THEMATGM

Focuses on the fundamentals, materials, processes, and applications of vat photopolymerization additive manufacturing

A Volume in the *Additive Manufacturing Materials and Technologies Series*

KEY FEATURES

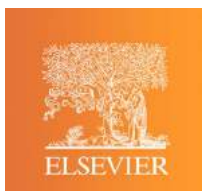
- Provides a detailed introduction to the technology, materials, and applications of vat photopolymerization additive manufacturing (AM)
- Discusses the basic chemistry in the vat photopolymerization process, including chemical reactions, ink components, functional additives, inhibitors, and more
- Covers techniques for creating plastics, hydrogels, shape memory polymers, ceramics, and more
- Details applications in bioengineering, engineering, metamaterials, and bio-inspired structures and functions

DESCRIPTION

Vat Photopolymerization Additive Manufacturing: 3D Printing Processes, Materials, and Applications focuses on the cutting-edge vat polymerization additive manufacturing technology, as well as its associated materials and potential applications. The book is divided into four parts, with the first providing some foundational concepts about the technology as well as providing background on the different vat photopolymerization techniques, such as grayscale, volumetric, multiwavelength, two-photon, and more. The basic chemistry involved in the vat photopolymerization process is covered here as well, as is vat photopolymerization 3D printing of functional materials, including plastics, hydrogels, stimuli-responsive polymers, ceramics, various applications of the materials created, and future directions.



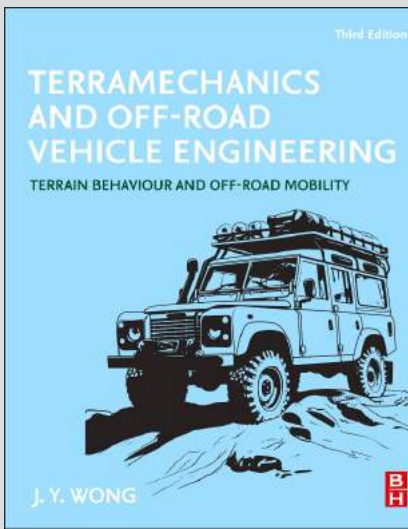
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Terramechanics and Off-Road Vehicle Engineering, 3e

Terrain Behaviour and Off-Road Mobility

J.Y. Wong, Department of Mechanical and Aerospace Engineering, Carleton University, Ottawa, Ontario, Canada

ISBN: 9780443156144

PREVIOUS ISBN: 9780750685610

PUB DATE: May 01, 2024

LIST PRICE: £130.00 / \$165.00 / €143.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 484

AUDIENCE: Undergraduate and postgraduate students as well as academic researchers in advanced programs related to automotive engineering, agricultural engineering, mechanical engineering, mining engineering, aerospace engineering, field robotics

BIC CODES: TRC, RBGB

THEMA CLASSIFICATION:

THEMATVB; THEMATRC;

THEMARBGB

Long-awaited new edition of an authoritative reference text on terramechanics and its applications to off-road vehicle engineering

KEY FEATURES

- Provides a comprehensive introduction to the mechanics of vehicle-terrain interaction
- Demonstrates through examples the application of computer-aided engineering methods to the parametric analysis of off-road vehicle performance
- Covers the most recent advancements in the off-road vehicle industry, encompassing evaluation, design, development, and/or procurement of high-mobility equipment for the recreational, agricultural, construction, mining, military, and aerospace sectors

DESCRIPTION

Terramechanics and Off-Road Vehicle Engineering: Terrain Behaviour and Off-Road Mobility, Third Edition provides comprehensive coverage of terrain behavior, mechanics of wheel- and track-terrain interaction, and various types of models for cross-country performance, ranging from empirical, through theoretical, to physics-based engineering models. The physics-based models for wheeled and tracked vehicle performance developed under the direction of Prof. J.Y. Wong have been gaining increasingly wider acceptance by industry and governmental agencies. The mathematical models established for vehicle-terrain systems enable the engineering practitioner to evaluate a wide range of options and select an appropriate vehicle configuration for any given mission and environment.

This long-anticipated revision presents the fields' significant developments over the past decade, both through updates to existing chapters and the inclusion of new material related to modeling applications in addition to a notable, state-of-the-art excursus on extra-terrestrial rovers.



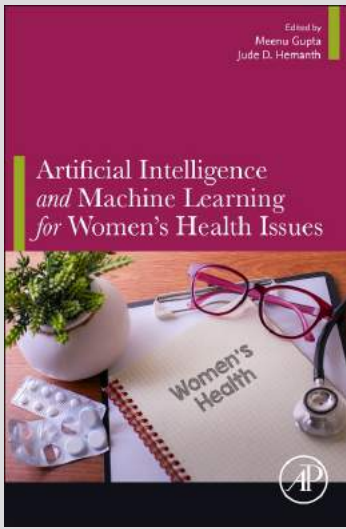
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Artificial Intelligence and Machine Learning for Women's Health Issues

Edited by : **Meenu Gupta**, PhD, Associate Professor, Department of Computer Science and Engineering University Centre of Research and Development Chandigarh University, Punjab, India. and **D. Jude Hemanth**, B.E., M.E., Ph.D, Professor, ECE Department, Karunya Institute of Technology and Sciences, Coimbatore, India

ISBN: 9780443218897
PUB DATE: May 01, 2024
LIST PRICE: £138.00 / \$180.00 / €160.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 279
AUDIENCE: Researchers and graduate students in the areas of robotics, biomedical engineering, machine learning, and healthcare research.
BIC CODES: UYQ, MQW, UYQM, TJFM1
THEMA CLASSIFICATION: THEMAUYQ; THEMATCB; THEMAMQW; THEMATJFM1

Highlights the challenges related to women's health issues and how technologies like machine learning and artificial intelligence help to resolve them

KEY FEATURES

- Provides fundamental concepts and analysis of machine learning algorithms used to aid in the diagnosis of women's health issues
- Guides researchers to specific ideas, tools, and practices most applicable to product/service development, innovation problems, and opportunities
- Provides hands-on chapters that describe frameworks, applications, best practices, and case studies of future directions of applied machine learning in women's healthcare

DESCRIPTION

Artificial Intelligence and Machine Learning for Women's Health Issues discusses the applications, challenges, and solutions that machine learning can bring to women's health challenges. The book illustrates advanced, innovative techniques, frameworks, concepts, and methodologies of machine learning which enhance the future healthcare system. This book's primary focus is on women's health issues and machine learning's role in providing solutions to these challenges, providing novel ideas for feasible implementation. It also provides an early-stage analysis for early diagnosis of women's health issues.



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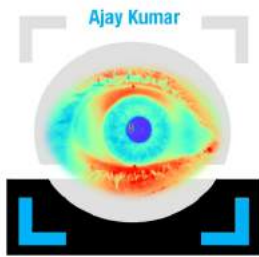


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Iris and Periocular Recognition using Deep Learning



Iris and Periocular Recognition using Deep Learning

Ajay Kumar, Department of Computing, The Hong Kong Polytechnic University Hong Kong, Kowloon, Hong Kong

ISBN: 9780443273186

PUB DATE: May 01, 2024

LIST PRICE: £121.99 / \$150.00 /

€140.99

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 191 x 235

PAGES: c. 325

AUDIENCE: Researchers, graduate students, and professional developers in Biometrics, Artificial Intelligence, Data Security Professionals in law enforcement departments, defense and related industrial sectors; system developers and Integrators for various information security related solutions

BIC CODES: UYQV, UYF

THEMA CLASSIFICATION:

THEMAUYF; THEMAUYQP;

THEMAUYQV

Investigates advanced techniques for iris and ocular recognition

KEY FEATURES

- Provides insightful algorithmic details into highly efficient and precise iris recognition using deep neural networks
- Unveils a collection of previously unpublished results and in-depth explanations of advanced ocular recognition algorithms
- Presents iris recognition algorithms specifically designed to bolster metaverse security, featuring specialized techniques for iris detection, segmentation, and matching
- Offers illustrative examples and comparative analysis, establishing reliability and confidence in deep learning-based methods over widely used conventional methods
- Provides access to the original codes and databases

DESCRIPTION

This book systematically explains the fundamental and most advanced techniques for ocular imprint-based human identification, with many applications in sectors such as healthcare, online education, e-business, metaverse, and entertainment. This is the first-ever book devoted to iris recognition that details cutting-edge techniques using deep neural networks. This book systematically introduces such algorithmic details with attractive illustrations, examples, experimental comparisons, and security analysis. It answers many fundamental questions about the most effective iris and periocular recognition techniques.



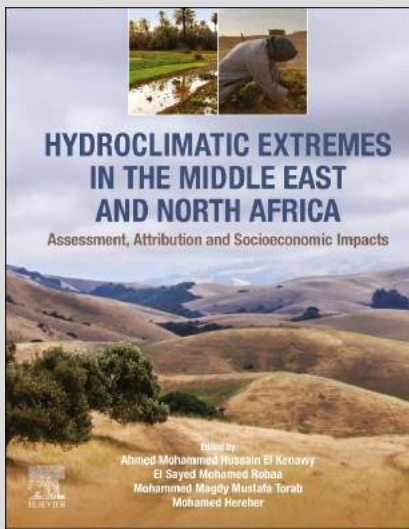
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Hydroclimatic Extremes in the Middle East and North Africa

Assessment, Attribution and Socioeconomic Impacts

Edited by : **Ahmed Mohammed Hussain El Kenawy**, Assistant Professor of Climatology, Mansour University, Egypt; **El Sayed Mohamed Robaa**, Professor of Environmental and Atmospheric Physics, Chairman of the Astronomy, Space Sciences and Meteorology Department, Cairo University, Egypt; **Mohammed Magdy Mustafa Torab**, Professor of Physical Geography, Faculty of Arts, University of Damanhur, Egypt and **Mohamed Hereher**, Professor of Environmental Science and Remote Sensing, Sultan Qaboos University, Oman

ISBN: 9780128241301
PUB DATE: May 01, 2024
LIST PRICE: £131.00 / \$170.00 / €148.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 372

AUDIENCE: Researchers and academics in climatology, atmospheric science, hydrological risk and management, and ecology.

Researchers and academics working in the fields of food production and hydrological infrastructure

BIC CODES: RN, RNPG

THEMA CLASSIFICATION:

THEMATQ; THEMARNPG

Expands knowledge on the spatiotemporal characteristics of hydrometeorological extremes in the Middle East and North-African region

KEY FEATURES

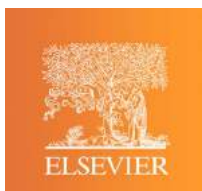
- Thoroughly details the effects of climate variability in the Middle East and North Africa region, a hotspot region of climate change vulnerability
- Examines changes in hydroclimatic extremes at different spatial scales, ranging from local assessments to investigations that cover the entire region
- Provides a comprehensive assessment of hydrometeorological feedback to current and future climate change in the MENA region
- Fills the current gap in the literature concerning the response of arid and semi-arid regions to climate change, with a particular emphasis on the MENA region
- Assesses future changes in hydroclimatic extremes in the region under different scenarios of greenhouse gas emissions

DESCRIPTION

Hydroclimatic Extremes in the Middle East and North Africa: Assessment, Attribution and Socioeconomic Impacts focuses on assessing the current situation of hydroclimatic extremes in the MENA region, with particular emphasis on dry and wet extreme events. The results of the rapidly changing atmospheric and oceanic situations of these extremes is addressed, presenting examples for the environmental, socioeconomic and cultural impacts of these events in the region and evaluating the current ability to monitor and adapt to such events. In addition, the book explores the potential use of advanced geospatial techniques in improving current understanding of these extreme events. The book utilizes a multidisciplinary approach with various state-of-the-art methods, approaches, and analytical techniques in environmental, meteorological, and hydrological sciences, providing case studies from the Middle East and North Africa region. It will be a valuable source of information for climatologists, meteorologists, hydrologists, agronomists, geographers, and water resource scientists.



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EARTH & ENVIRONMENT Environmental Science

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Microplastics

Transport, Impacts, Monitoring and Mitigation

Natalie Welden, Lecturer in Environmental Science and Sustainability, University of Glasgow, Rutherford/McCowan Building, Crichton University Campus, Dumfries, UK.

ISBN: 9780443133244
PUB DATE: May 01, 2024
LIST PRICE: £95.95 / \$125.00 / €109.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 195

AUDIENCE: Environmental scientists, environmental engineers, environmental managers, researchers, waste managers and planners, and students seeking to develop their understanding of microplastic pollution, pollution dynamics, ecotoxicology, and remediation, Biologists and Ecologists

BIC CODES: TQSR, TQK, RN

THEMA CLASSIFICATION:

THEMATQ; THEMATQK;

THEMARNH; THEMATQSR

A critical account of advancements in the monitoring and mitigation of microplastic pollution

KEY FEATURES

- Models the issue of microplastic pollution with historic case studies of alternative pollutants
- Demonstrates the differing requirements of microplastic monitoring and management
- Contains idealized workflows specific to key practitioner groups, the content of which will reflect recent debates and divergences in the field
- Emphasizes critical comparison between emerging management measures not apparent in current edited texts which tend to consider individual approaches separately
- Places management and remediation methods in the context of the observed scale and impact of associated microplastics in the environment to indicate the potential benefits of each approach

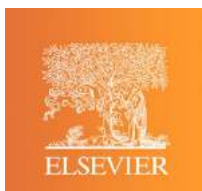
DESCRIPTION

Microplastics: Transport, Impacts, Monitoring and Mitigation provides a critical analysis of our current understanding of microplastic science, the methods by which microplastic are observed in the environment, and our options for mitigation and remediation. The book is intended for those studying or working in the fields of environmental science and waste management (as well as associated areas), and provides the holistic context needed to evaluate and interpret the outputs associated with the interlinked problems of plastic and microplastics.

In this manner, the reader will be invited to explore the ongoing challenges which have thus far prevented the development of a thorough understanding of the risk posed by plastic and microplastic pollution to be able to discuss the implications of ongoing uncertainty to effective plastic management and evaluate the current strategies to control the ongoing proliferation of plastic pollution.



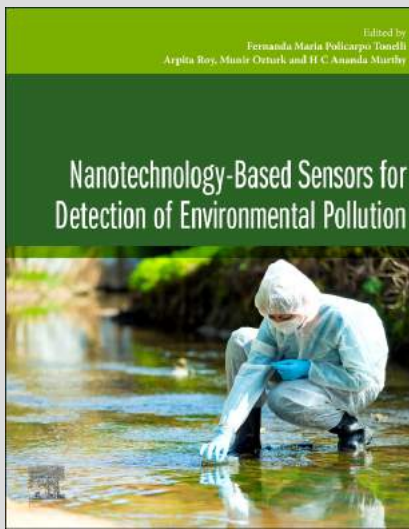
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EARTH & ENVIRONMENT Environmental Science

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Nanotechnology-Based Sensors for Detection of Environmental Pollution

Edited by : **Fernanda Maria Policarpo Tonelli**, Professor / Researcher, Federal University of São João del Rei, Minas Gerais, Brazil; **Arpita Roy**, Assistant Professor, Sharda University, Greater Noida, India; **Munir Ozturk**, Professor / Researcher, Ege University, Bornova Izmir, Turkey and **H C Ananda Murthy**, Professor / Researcher, Adama Science and Technology University, Ethiopia

ISBN: 9780443141188
PUB DATE: May 01, 2024
LIST PRICE: £115.00 / \$150.00 / €130.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 191 x 235

PAGES: c. 558

AUDIENCE: Researchers, scientists, instructors, undergraduate and graduate students that are interested in environmental pollution, nanoscience applied to pollutants' detection, and biotechnology. Practitioners and professionals

BIC CODES: RN, TQK

THEMA CLASSIFICATION:

THEMATQ; THEMATQK

Offers readers extensive knowledge on nanotechnology-based sensors as strategic tool to detect harmful pollutants present in different environments

KEY FEATURES

- Provides a comprehensive, multidisciplinary review of nanotechnology-based sensors
- Supplies readers extensive knowledge on detecting harmful pollutants in different environments using nanotechnology-based sensors
- Presents chapters dedicated to the detection of pollutants different from toxic gas and pharmaceutical products, such as pesticides, heavy metals, dyes, pathogens, and petroleum hydrocarbons
- Introduces information on pollutants and the threats they represent to living beings, nanotechnology-based sensor's design and fabrication, a brief history of the field, and practical issues related to the field, such as economics, safety, and challenges

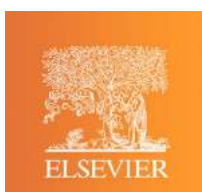
DESCRIPTION

Nanotechnology-Based Sensors for Detection of Environmental Pollution discusses the use of nanotechnology to generate sensors capable of performing efficient detection of different types of environmental pollutants. Sections explore environmental pollution as a threat to life on Earth, the main contaminants (inorganic, organic or pathogens), and the risk they represent to living beings. Others are dedicated to nanotechnology, allowing pollutants' detection, a brief history of nanotechnology-based sensors, different types of nanotechnology-based sensor (optical, electrochemical, and magnetic), nanotechnology-based sensors' design and fabrication, nano biosensors, and more.

Additional sections focus on important specific pollutants (pesticides, heavy metal, dyes, toxic gas, pharmaceutical waste, petroleum hydrocarbons, and pathogenic microbes) and their detection by nanotechnology-based sensors and important nanomaterials in nanotechnology-based sensors, exploring carbon-based and non-carbon-based material in nanoscale (graphene, carbon nanotubes, quantum dots, magnetic nanomaterials, non-magnetic nanoparticles) and also point-of-care sensors and functionalization to generate optimized nanotechnology-based sensors to pollutants' detection.



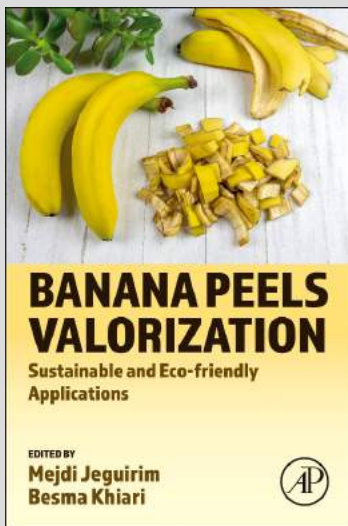
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EARTH & ENVIRONMENT Environmental Management

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Banana Peels Valorization

Sustainable and Eco-friendly Applications

Edited by : **Mejdı Jeguirim**, Associate Professor, University of Alsace, France and **Besma Khiari**, Professor, Ecole Nationale d'Ingénieurs de Carthage, Tunis, Tunisia

ISBN: 9780323959377

PUB DATE: May 01, 2024

LIST PRICE: £155.00 / \$200.00 / €175.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 357

AUDIENCE: Agricultural or food engineers who work in the banana groves and in the banana processing industry and are seeking to improve their by-products management by actively utilizing them in effective applications, Researchers working in the edge of food, environmental and energy fields, Food scientists and technologists, Energy, Environmental, agricultural and chemical engineers, Agriculturists, crop cultivators, agricultural engineers, farming specialists, biologists, Professional working in the food and fruit processing industry, Researchers, specialists, chemical engineers and professionals working in the agro-food processing industry, New product developers in the food and agricultural industry, Graduates and post-graduate level multi-discipline courses dealing with agricultural science, food technology, environmental, energy, waste valorization, sustainability, and chemical engineering

BIC CODES: TVH, PSV

THEMA CLASSIFICATION: THEMPSV; THEMATVH

Covers the valorization of banana peels for the production of value-added products

KEY FEATURES

- Provides a global overview of world production, physicochemical and microbiological characteristics of banana peels
- Explores banana tree and fruit wastes including their quantification and classification
- Discusses each sustainable application of banana peels in a specific chapter based on the sector category

DESCRIPTION

Banana Peels Valorization: Sustainable and Eco-friendly Applications provides a global overview of world production, physicochemical and microbiological characteristics of Banana Peels and the various pathways for their valorization, considering the advantages, disadvantages and factors impacting on each way of valorization. Each chapter deals with sustainable applications based on the sector category. Such structure helps the audience from a specific field to easily identify the specific application. Successful case study of a banana processing by-products valorization is also presented.

Written by a team of interdisciplinary experts, this is the ultimate valuable resource for agricultural or food engineers who work in the banana groves and in the banana processing industry, and also for Researchers working in correlated areas of food, environmental and energy fields.



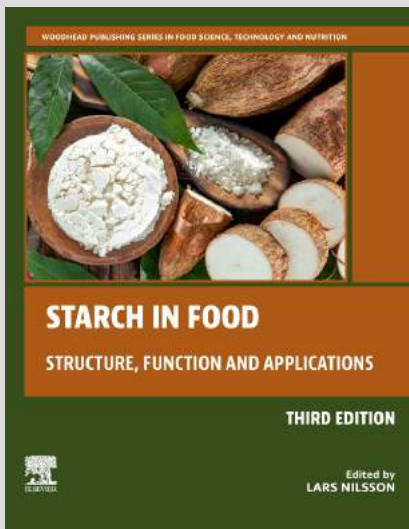
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FOOD SCIENCE, TECHNOLOGY & NUTRITION

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Starch in Food, 3e

Structure, Function and Applications

Edited by : **Lars Nilsson**, Associate Professor, Lund Center for Field-Flow Fractionation and Food Colloids Group, Department of Food Technology, Engineering and Nutrition, Lund University, Sweden

ISBN: 9780323961028

PREVIOUS ISBN: 9780081008683

PUB DATE: May 01, 2024

LIST PRICE: £270.00 / \$330.00 / €315.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 8.50w x 10.875h

PAGES: c. 372

AUDIENCE: Food Chemists, Technologists and researchers in nutrition within academia and industry, Researchers within general chemistry, chemical engineering, biotechnology, or similar, working with starch-related research topics, within academia and industry

BIC CODES: TDCT

THEMA CLASSIFICATION: THEMATDCT

Reviews starch structure, functionality and the growing range of starch ingredients

KEY FEATURES

- Thoroughly revised edition bringing updated and new chapters covering the fundamentals of starch applications
- Explores starch aspects such as granular and molecular structure and properties, analysis, biosynthesis and general functionality of starch in foods
- Covers insights into how starch-related formulation challenges can be addressed
- Brings future outlook and trends in the starch arena

DESCRIPTION

Starch in Food: Structure, Function and Applications, Third Edition is now fully updated with eleven new chapters covering "hot" areas for starch applications, such as starch-based pickering emulsifiers, starch for structuring gluten-free bread products, and starch microspheres for encapsulation of probiotic bacteria. Sections illustrate how plant starch can be analyzed and modified, including chapters on analysis of starch molecular structure, molar mass and size, the relationship between structure and digestion of starch, sources of starch, including new chapters on cereal, root and tuber and pulse starches, and starch applications, with a new chapter on utilizing starches in product development, in baked products and in gluten-free bread.

Starch selection is one of the most complex areas for a product developer, yet starch is key to solving formulation challenges when developing products to meet many of the emerging consumer trends. This book aids the end user on acquiring knowledge on fundamental starch aspects, such as granular and molecular structure and properties, analysis, biosynthesis and general functionality of starch in foods.



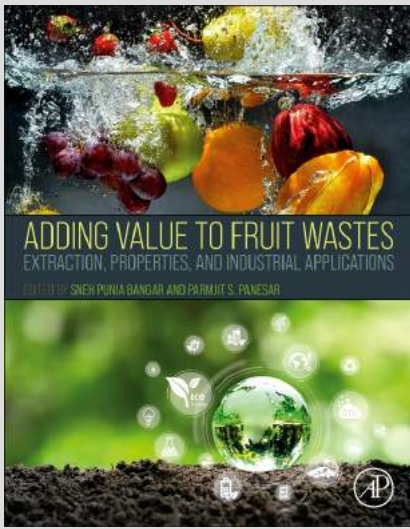
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FOOD SCIENCE, TECHNOLOGY & NUTRITION

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Adding Value to Fruit Wastes

Extraction, Properties, and Industrial Applications

Edited by : **Sneh Punia Bangar**, Postdoctoral Researcher, Clemson University, South California, USA and **Parmjit S Panesar**, PhD, Department of Food Engineering and Technology, Sant Longowal Institute of Engineering and Technology, Punjab, India

ISBN: 9780443138423

PUB DATE: May 01, 2024

LIST PRICE: £155.00 / \$200.00 / €175.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 210 x 270

PAGES: c. 461

AUDIENCE: Researchers, scientists, students (Master, Ph.D., and post-doctoral students) in related areas with an interest in developing professional, research, and lecturing activities related to Food Science and Technology and related knowledge presented in this book, Professionals, technicians, staff members, researchers and other professionals who actively work, develop research, promote scientific activities, and are interested in the development of research, teaching, and lecturing in Food Science and Technology

BIC CODES: TDCT

THEMA CLASSIFICATION: THEMATDCT

Explores value-added fruit components and their applications in the real food system

KEY FEATURES

- Covers valorization approaches of fruit waste for starch, protein, fibers, and phenolics
- Includes novel green techniques for the extraction of the functional compounds
- Brings industrial applications of value-added functional compounds

DESCRIPTION

Adding Value to Fruit Wastes: Extraction, Properties, and Industrial Applications provides the latest technologies used in fruit waste to extract, isolate, and characterize functional, active compounds and their diversified pharmacological, food, agricultural, and industrial applications. Divided in three sections, the book explores emerging technologies for the extraction of functional components, discusses value-added components, and works as a guide to its applications. The book also covers fruit wastes for extracting starch to provide more cereal crops available as food, besides supporting the efficient utilization of fruit wastes to bring opportunities for extraction of functional components in a sustainable manner for food applications.

Written by a team of experts in the field, this book provides technicians, researchers, food technology experts, food industry personnel, and academia with value addition to the fruit waste and a lot more opportunities for extraction of functional components in a sustainable manner for food applications.



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Microbial Vitamins and Carotenoids in Food Biotechnology

Novel Source and Potential Applications

Edited by
Syed Amir Ashraf
Mohammed Kuddus



Microbial Vitamins and Carotenoids in Food Biotechnology

Novel Source and Potential Applications

Edited by : **Syed Amir Ashraf**, Senior Lecturer, Department of Clinical Nutrition, University of Hail, Saudi Arabia and **Mohammed Kuddus**, Professor, Department of Biochemistry, College of Medicine, University of Hail, Hail, Kingdom of Saudi Arabia

ISBN: 9780443155284

PUB DATE: May 01, 2024

LIST PRICE: £155.00 / \$200.00 / €175.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 424

AUDIENCE: Food scientist, food analyst, food and agricultural research communities, food ingredient suppliers, biotechnologist, food processing industries, food microbiologists, regulatory affairs, along with academic and research scholars doing research in various related sectors.

Scientific communities doing research with research scholars working in food biotechnological processes, bioengineering, biochemistry, molecular biology, microbiology, environmental science, food science, pharmaceuticals, and biotech industries, Graduate and post-graduate students as a secondary audience by addressing the latest research going on in the field of vitamins and carotenoids production using various biotechnological processes. Research scholars who is working on new product development from microorganisms. Students perusing undergraduate and postgraduate degrees in Food Science, Biotechnology, Biochemistry, Bioengineering, Microbiology, Food Technology

BIC CODES: PSG, TDCT

THEMA CLASSIFICATION: THEMATDCT; THEMAPSG

BIC CODES: PSG, TDCT

THEMA CLASSIFICATION: THEMATDCT; THEMAPSG



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Reviews microbial vitamins and carotenoid sources and their current use and advances in the food industry

KEY FEATURES

- Thoroughly explores biotechnological approaches surrounding the production and application of microbial vitamins and carotenoids in food processing and manufacturing industries
- Covers the major portion of novel source and various biotechnological approaches used for the production of various types of vitamins and carotenoids from microorganisms and their applications in food industry
- Contains up-to-date information required for the formulations of new products or protocols for enhancing production of specific compounds

DESCRIPTION

Microbial Vitamins and Carotenoids in Food Biotechnology: Novel Source and Potential Applications provides important insights to help readers understand the molecular mechanisms involved in the microbial biosynthesis of vitamins and carotenoids. The book's chapters put forward all the latest advancements concerning the production and applications of microbial vitamins and carotenoids. It also provides a sustainable alternative to chemically synthesized compounds and presents wide coverage on the most promising sources of vitamins and carotenoids in food and pharmaceutical industries.

This is a complete and unique resource beneficial for the scientific communities as well as food science and nutrition research students.

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Handbook of Plant-Based Meat Analogs

Innovation, Technology and Quality

Edited by : **Gokare A. Ravishankar**, Professor of Biotechnology, serving as Adjunct- Vice-President in Research and Development, Life Science Division, Dayananda Sagar Institutions, India.; **Ambati Ranga Rao**, Associate Professor and Senior Scientist in the Department of Biotechnology, Vignan's Foundation Science, Technology and Research University, Andhra Pradesh, India; **Reza Tahergorabi**, Associate Professor of Food Science, Department of Family and Consumer Sciences, NC A&T State University, USA and **Anand Mohan**, Associate Professor in Food Science and Technology, University of Georgia, Athens, GA , USA

ISBN: 9780443218460
PUB DATE: May 01, 2024
LIST PRICE: £195.00 / \$250.00 / €220.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 8.50w x 10.875h

PAGES: c. 558

AUDIENCE: Researchers, academics and advanced level students in agriculture, food security, and food chemistry. Researchers, academics and advanced level students in nutrition, food policy, law, regulation

BIC CODES: LNKF, KNAC, TCB, KJS, KCT

THEMA CLASSIFICATION:

THEMALNKF; THEMAKNA;

THEMAKCM; THEMATCB;

THEMAKJS

Provides insights into the production and consumer acceptance of meat substitutes

KEY FEATURES

- Organizes chapters by sections on types, processing, health benefits, sensory evaluation, and regulatory/safety issues of meat analogs
- Includes methods and protocols for producing, storing, and evaluating meat analogs
- Covers meat analogs from plants, grains, nuts, microbes, and more
- Provides case studies to illustrate concepts and practices

DESCRIPTION

Handbook of Plant-Based Meat Analogs: Innovation, Technology and Quality presents the growing opportunities and challenges of meat substitutes from plant-based resources. Addressing core topics from source ingredients to consumer acceptance, it provides a comprehensive starting point for those seeking to explore sustainable meat alternative products. To date, the full potential of plant-based meat products has been underexplored, underutilized, and underrepresented. This book provides the most up-to-date information on plant-based meat analogs, sources of ingredients, industrial processes, large-scale production, and health benefits, including safety and regulatory aspects and environmental implications.



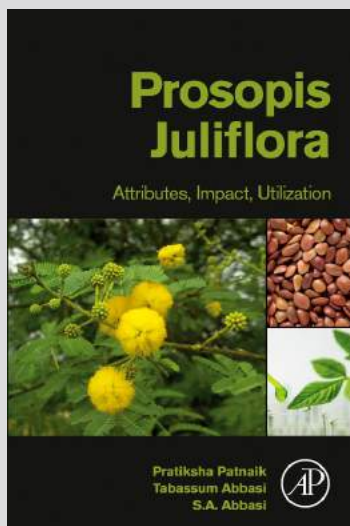
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Prosopis Juliflora

Attributes, Impact, Utilization

Pratiksha Patnaik, Research Associate, Centre for Pollution Control and Environmental Engineering Pondicherry University, India; **Tabassum Abbasi**, Assistant Professor, Centre for Pollution Control and Environmental Engineering, Pondicherry University, Chinnakalpet, Puducherry, India and **S. A. Abbasi**, Professor, Centre for Pollution Control and Environmental Engineering, Pondicherry University, Chinnakalpet, Puducherry, India

ISBN: 9780128198247
PUB DATE: May 31, 2024
LIST PRICE: £118.00 / \$150.00 / €132.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 186
AUDIENCE: Students, researchers and governmental agencies interested in plant biology, forestry, plant ecology, invasive plant species and environmental science.
BIC CODES: PST
THEMA CLASSIFICATION: THEMAPPST

A complete resource on how to best utilize *Prosopis juliflora*

KEY FEATURES

- Summarizes all the key information available on *P. juliflora*, from its origin and systematics to its future prospects
- Discusses colonization, utilization and eradication
- Authored by leading experts in the field with over 40 years of experience

DESCRIPTION

Prosopis (Prosopis juliflora) is a xerophyte which, in its native habitats has been a desert plant. As long as it was confined to that habitat, *P. juliflora* was a great resource, improving the region's micrometeorology, binding its sandy soil, and providing shelter, fuel, feed, food, medicines, and cosmetics to the people of such regions. In particular, for the economically weaker inhabitants, *P. juliflora* was a lifeline. But when *P. juliflora* was indiscriminately introduced in other regions of the world in a hope to derive similar benefits from it, things began to go awry. Indeed, among the invasive species of plants which are spreading at an alarming rate in the tropical and sub-tropical regions of the world, *P. juliflora* is arguably the most hardy and resilient. It is growing so explosively that it even enters roads and homes, driving humans out of their dwellings. The resulting damage to biodiversity is enormous. This book highlights the dual role played so far by *P. juliflora* and itemizes the facets that make it a blessing in some contexts and a bane in other contexts. Authored by leading experts in the field, *Prosopis juliflora: Attributes, Impact, Utilization* is the first title of its kind to comprehensively discuss this hardy plant species. It will be an essential read for students, researchers and governmental agencies interested in plant biology, forestry, plant ecology, invasive plant species and environmental science.



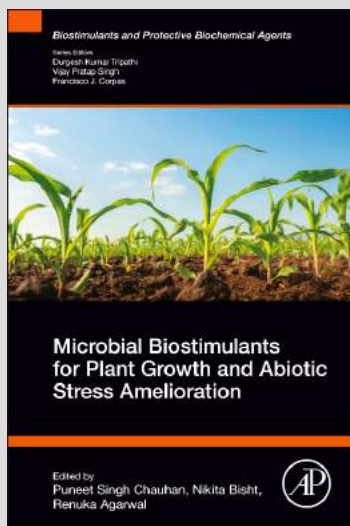
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LIFE SCIENCES Botany

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Microbial Biostimulants for Plant Growth and Abiotic Stress Amelioration

Edited by : **Puneet Singh Chauhan**, Principal Scientist and Head, CSIR-National Botanical Research Institute, India; **Nikita Bisht**, Microbial Technologies Division, CSIR-National Botanical Research Institute, Lucknow, India and **Renuka Agarwal**, Microbial Technologies Division, CSIR-National Botanical Research Institute, India.

ISBN: 9780443133183
PUB DATE: May 01, 2024
LIST PRICE: £155.00 / \$200.00 / €175.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 465
AUDIENCE: Researchers and academics in the areas of plant science and agronomy/crop science
BIC CODES: TVK, PST, PSD
THEMA CLASSIFICATION: THEMATVK; THEMAPSD; THEMAPST

Helps readers understand the potential benefits of biostimulants in addressing abiotic stress conditions

A Volume in the *Biostimulants and Protective Biochemical Agents Series*

KEY FEATURES

- Presents the potential for more environmentally sustainable interventions against abiotic stresses
- Highlights the variety of applications for which biostimulants are proving effective
- Includes coverage of commercialization and role in addressing Sustainability Development Goals

DESCRIPTION

Microbial Biostimulants for Plant Growth and Abiotic Stress Amelioration, the latest release in the *Biostimulants and Protective Biochemical Agents* series, provides readers with insights into the major role of biostimulants in plant growth and development while under abiotic stress. The term biostimulants is broadly used to reference a group of diverse substances and microorganisms that stimulate life or that promote favorable plant responses. They stimulate natural processes to enhance/benefit nutrient uptake, nutrient efficiency, tolerance to abiotic stress, and crop quality.

Many biostimulants improve nutrition and they do so regardless of their own nutrient contents. Further, recently microbe-based biostimulants have emerged as important plant protectors under a range of adverse conditions.



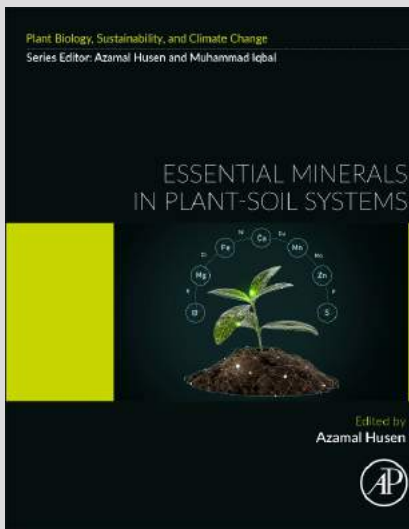
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Essential Minerals in Plant-Soil Systems

Coordination, Signaling, and Interaction under Adverse Situations

Edited by : **Azamal Husen**, Ph.D., Foreign Delegate at Wolaita Sodo University, Wolaita, Ethiopia

ISBN: 9780443160820
PUB DATE: May 01, 2024
LIST PRICE: £155.00 / \$200.00 / €175.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 191 x 235
PAGES: c. 372
AUDIENCE: Advanced level undergraduate – graduate students seeking supplementary information
BIC CODES: PST, PSAF, PSTS, RBGB
THEMA CLASSIFICATION: THEMAPPST; THEMAPPSTAF; THEMAPPSTVB; THEMAPPSTVBG

Presents the significance of essential as well as beneficial elements for sustainable plant growth and production

A Volume in the *Plant Biology, sustainability and climate change Series*

KEY FEATURES

- Provides a comprehensive overview of micro- and macronutrients and their interaction with phytohormones under stress conditions
- Explores proteomic and genomic research into deficiencies and toxicities in plant systems
- Highlights the use of nanobiotechnology for controlled release of micro- and macronutrients in the plant-soil systems

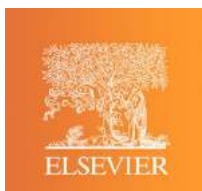
DESCRIPTION

Essential Minerals in Plant-Soil Systems: Coordination, Signaling, and Interaction under Adverse Situations is the first book to encompass these key aspects of plant science, biochemistry, soil science and fertilizer development in a single volume. Describing the micro- and macronutrients in the plant-soil system with the help of suitable illustrations, the book connects all the pieces enabling comprehensive and connected understanding. Sections cover recent advances in the understanding of how plants coordinate the acquisition, transport, signaling, and interaction, and cross-talks between macro- and micro-nutrients in adverse environmental situations.

This book is a valuable reference for those putting research into practice in addressing stress situations, as well as providing important foundational insights for further research.



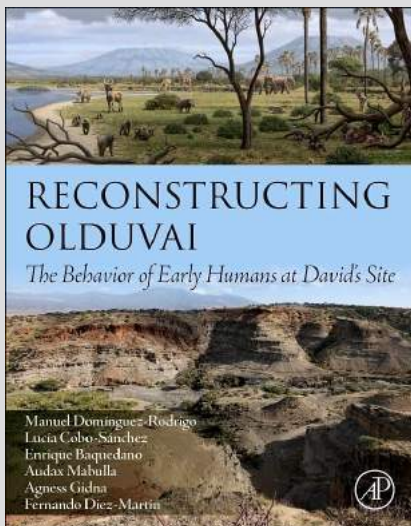
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Reconstructing Olduvai

The Behavior of Early Humans at David's Site

Manuel Domínguez-Rodrigo, PhD, Professor of Prehistory, Department of History and Philosophy, University of Alcalá, Madrid, Spain; **Audax Mabulla**, PhD, University of Dar Es Salaam, Tanzania; **Enrique Baquedano**, PhD, University of Alcalá; **Agness Gidna**, PhD, National Museum of Tanzania, Tanzania; **Lucía Cobo-Sánchez**, PhD, Researcher, Interdisciplinary Center for Archaeology and Evolution of Human Behavior (ICArEHB), University of Algarve, Spain and **Fernando Díez-Martín**, PhD, Professor of Prehistory, University of Valladolid, Spain

ISBN: 9780443273827
PUB DATE: May 01, 2024
LIST PRICE: £121.99 / \$150.00 / €142.99

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 8.50w x 10.875h

PAGES: c. 325

AUDIENCE: Academic researchers studying evolution of human behavior, archaeology, taphonomy, geology, paleobotany, paleontology, and anthropology

BIC CODES: RBX, PS, HD

THEMA CLASSIFICATION:

THEMARBX; THEMAPS; THEMANK

Provides a detailed account of the dietary, technological, and social behaviors of early humans based on discoveries at David's Site

KEY FEATURES

- Describes the discovery and excavation of David's Site (DS) at Olduvai Gorge, Tanzania
- Details the geological and paleoecological reconstruction of all Olduvai Gorge Bed I sites
- Summarizes the impact of taphonomic analyses at Bed I sites on our understanding of early human behaviors
- Explores the dietary habits and technologies of early Pleistocene hominins

DESCRIPTION

Reconstructing Olduvai: The Behavior of Early Humans at David's Site provides the necessary information for future generations of archaeologists to peer into the lifestyle of early humans. Much of what is known about these hominins originates from the detailed excavations that Mary Leakey carried out at Olduvai Gorge in Tanzania. Since then, work at Olduvai has produced a wealth of new fossils, resulting in the discovery of David's Site, the biggest early Pleistocene site in the world. This will be an indispensable resource for students, academics, and researchers who share an interest in the evolution of early human behavior.

Written by leaders of present-day excavations at Olduvai Gorge, this book is systematically divided into three parts to deliver a clear account of the research advancements at David's Site. Part I focuses on the presentation of the site and the description of its geological and palaeoecological reconstruction. Part II examines hominin feeding habits, including how they brought, processed, and consumed animals at the site. Part III explores hominin technologies, including reconstruction of the stone-tool activities carried out at the site.



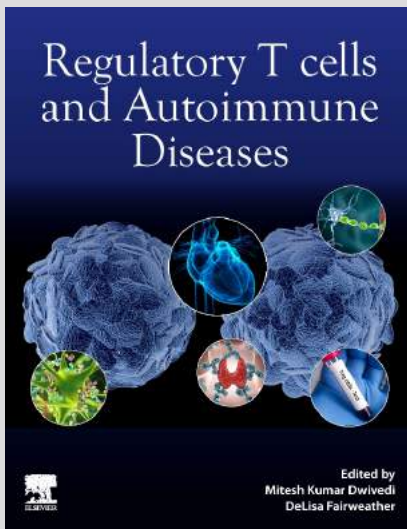
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LIFE SCIENCES Biology

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Regulatory T cells and Autoimmune Diseases

Edited by : **Mitesh Kumar Dwivedi**, Assistant Professor of Microbiology, C. G. Bhakta Institute of Biotechnology, Uka Tarsadia University, India and **DeLisa Fairweather**, Director of Translational Research Department Cardiovascular Medicine, Mayo Clinic, USA

ISBN: 9780443139475
PUB DATE: May 01, 2024
LIST PRICE: £195.00 / \$250.00 / €220.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 8.50w x 11.00h

PAGES: c. 995

AUDIENCE: Budding biomedical researchers/established researchers in various disciplines including Immunology, Microbiology, Biotechnology Medical Microbiology, Medical Biotechnology and Medicine (MBBS, MD), Post-graduate students of basic life sciences, Molecular Immunology, Immunotechnology, etc. Industry personnel (Pharmaceutical industries, Nutraceutical industries, Health Research Centers, etc.) and post-doctoral researchers working on regulatory T cells-based therapies, mechanistic aspects of autoimmune diseases, etc.

BIC CODES: MJCM

THEMA CLASSIFICATION: THEMAMJCM



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A structured summary of emerging mechanistic aspects of Tregs in pathogenesis and treatment of organ specific autoimmune diseases

KEY FEATURES

- Brings the reader up-to-date on the mechanisms of regulatory T cells (Tregs) in pathogenesis and therapeutics of all autoimmune diseases known to date
- Provides explicit color illustrations and comprehensible tables for explaining the mechanistic aspects and emerging information in the field
- Includes human clinical trials and animal model studies for Tregs in diverse autoimmune diseases for the mitigation of the symptoms of autoimmune diseases
- Offers scientifically applicable and relevant content for readers of various disciplines, including biomedical sciences, medical microbiology/biotechnology, immunology, and medicine

DESCRIPTION

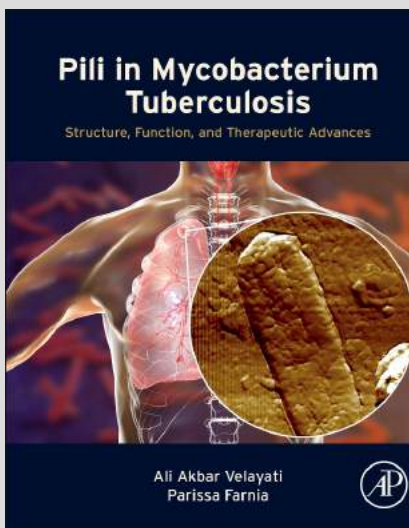
Regulatory T Cells and Autoimmune Diseases addresses recent findings concerning the role of Tregs in the pathogenesis of autoimmune diseases as well as their therapeutic applications. In particular, this book deals with various Treg-based mechanisms that can lead to autoimmune disease and covers different aspects linking Tregs with autoimmune mechanisms involved in disease development by discussing animal models and human studies.

This book specifically focuses on Treg-based therapeutics and their targets to manage all known autoimmune rheumatic, central nervous system, bowel, liver, thyroid, kidney, myopathic, skin, blood and blood vessel, and eye diseases and aims to provide a must-have reference for designing therapeutic strategies to treat these autoimmune diseases. Additionally, this book covers vaccine-induced effects on the functioning of Tregs and development of CAR Treg therapy for autoimmune diseases and concludes with current challenges and future prospects of Treg-based therapeutics. This book is carefully designed to meet the requirements of both basic and advanced researchers in the area and provide new dimensions and insight into regulatory T cells' role in autoimmune disease pathogenesis and therapy.

LIFE SCIENCES Immunology

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Pili in Mycobacterium Tuberculosis

Structure, Function, and Therapeutic Advances

Ali Akbar Velayati, Director, National Research Institute of Tuberculosis and Lung Diseases (NRITLD) and **Parissa Farnia**, Director, Mycobacteriology Research Center, National Research Institute of Tuberculosis and Lung Disease (NRITLD), Shahid Beheshti University of Medical Science, WHO Collaborating Centre, Masih Daneshvari Hospital, Iran

ISBN: 9780443217128
PUB DATE: May 15, 2024
LIST PRICE: £134.00 / \$175.00 / €155.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 191 x 235

PAGES: c. 279

AUDIENCE: Researchers in microbiology involved in the study of mycobacteriology and the MTBC bacteria, particularly those interested in researching pili in Mycobacterium tuberculosis. Researchers working in antibiotics development, vaccine development, and host-directed therapy

BIC CODES: PSGD, PSG

THEMA CLASSIFICATION: THEMAPSG

Informative reference on the types of pili produced by the tuberculosis-causing bacterium, Mycobacterium tuberculosis, its structure, function, and therapeutic potential

KEY FEATURES

- Covers the structure, synthesis, and function of pili produced by the tuberculosis-causing bacterium, Mycobacterium tuberculosis (MTBC)
- Explains the mechanism of bacteria-host attachment and the importance of this phenomena in mycobacterium tuberculosis pili and other bacteria
- Emphasizes the use of advanced techniques to study and investigate the TB-bacilli and its interaction with host cells

DESCRIPTION

Pili in Mycobacterium Tuberculosis: Structure, Function, and Therapeutic Advances discusses the types of pili produced by the tuberculosis-causing bacterium, Mycobacterium tuberculosis (MTBC). The book examines the structure of pili shown under electron and atomic force microscopy and by using whole genome sequencing, and outlines the importance of pili in mycobacterium tuberculosis. It then explores the role of pili in bacteria-host interactions and in drug development and delivery. Sections open with an overview of the structure, synthesis, and function of pili in bacteria. This includes taxonomy and the role of pili in diseases.

The book also examines the preparation of Mycobacterium tuberculosis for electronic and atomic microscopy and looks at the different life cycles and susceptibility patterns of MTBC and goes on to discuss the expression and function of pili using whole genome sequencing and PCR-based methods and delves into bacteria host interactions. Lastly, it explores the development of new drugs and its delivery by pili.



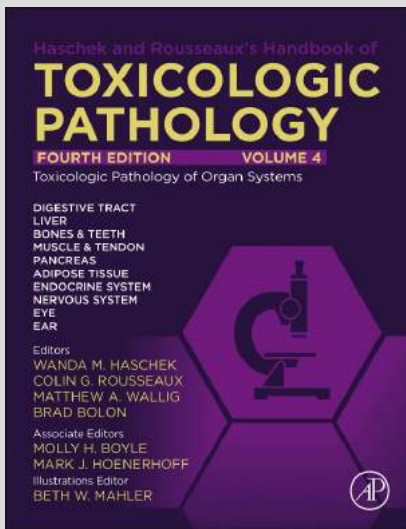
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Haschek and Rousseaux's Handbook of Toxicologic Pathology, Volume 4: Toxicologic Pathology of Organ Systems, 4e

Edited by : **Wanda M. Haschek**, BVSc, PhD, DACVP, FIATP, Professor Emerita, Dept of Veterinary Pathobiology, College of Veterinary Medicine, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA; **Colin G. Rousseaux**, BVSc [Hons], PhD, DABT, FRCPath, FIATP, FATS, Adjunct Professor, Department of Pathology and Laboratory Medicine, University of Ottawa Principal, Colin Rousseaux and Associates, Canada; **Matthew A. Wallig**, DVM, PhD, DACVP, Professor Emeritus, Department of Veterinary Pathobiology, College of Veterinary Medicine University of Illinois at Urbana-Champaign, Urbana, Illinois, USA

ISBN: 9780128210468
PUB DATE: May 02, 2024
LIST PRICE: £205.00 / \$250.00 / €240.00

DISCOUNT: Reference

FORMAT: Hardback

TRIM: 8.50w x 10.875h

PAGES: c. 890

ILLUSTRATIONS: Approx. 500 illustrations (500 in full color)

AUDIENCE: Scientists, including pathologists, toxicologists and graduate students, in academia, industry and government, Potential settings include biopharmaceutical, medical device, and chemical companies, contract and basic research organizations, veterinary diagnostic laboratories and medical forensic laboratories, regulatory agencies and universities

BIC CODES: MMTG, MZ

THEMA CLASSIFICATION: THEMAMZ; THEMAMKGT

The single most definitive reference on toxicologic pathology for scientists and researchers in industry, academia, and government

KEY FEATURES

- Presents updated chapters on systems toxicologic pathology, including new chapter on olfactory
- Offers high-quality and trusted content in a multi-contributed work written by leading international authorities in all areas of toxicologic pathology
- Features hundreds of full-color images in both the print and electronic versions to highlight difficult concepts with clear illustrations

DESCRIPTION

Haschek and Rousseaux's Handbook of Toxicologic Pathology, Volume Four: Toxicologic Pathology of Organ Systems is a key reference on the integration of structure and functional changes in tissues associated with the response to pharmaceuticals, chemicals and biologics. Organ systems covered include cardiac, vascular and skeletal muscle systems and the endocrine, respiratory, reproductive, digestive and nervous systems. Completely revised with a new olfactory chapter, this new release is an essential part of the most authoritative reference on toxicologic pathology for pathologists, toxicologists, research scientists and regulators studying and making decisions on drugs, biologics, medical devices, and other chemicals, including agrochemicals and environmental contaminants.



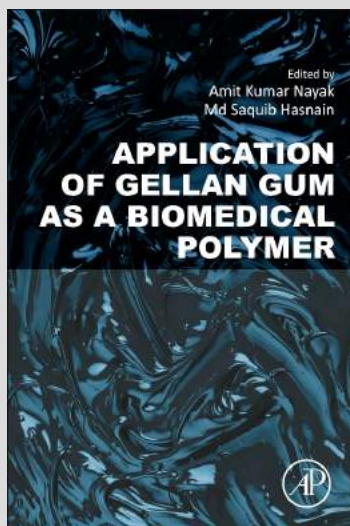
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Application of Gellan Gum as a Biomedical Polymer

Edited by : **Amit Kumar Nayak**, PhD, Department of Pharmaceutics, School of Pharmaceutical Sciences, Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, Odisha, India and **Md Saquib Hasnain**, Ph.D, Department of Pharmacy, Palamau Institute of Pharmacy, Daltonganj, Jharkhand, India

ISBN: 9780323918152
PUB DATE: May 01, 2024
LIST PRICE: £115.00 / \$150.00 / €131.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 395

AUDIENCE: Biotechnologists, pharmaceutical scientists, chemical engineers including industrial and analytical scientists, healthcare professionals and regulatory scientists actively involved in biomedical product development using natural polysaccharides, Postgraduate students, doctoral and postdoctoral research fellows engaged in research of biological macromolecules, especially natural polymers for biomedical applications

BIC CODES: MQW, TCB, TGM, TDCP

THEMA CLASSIFICATION:

THEMATCB; THEMATGM;
THEMAMQW; THEMATGMP;
THEMATDPF; THEMATDCP

Detailed reference covering key topics and fundamental aspects of gellan gum and its biomedical applications for scientists, researchers, and those in product development

KEY FEATURES

- Discusses gellan gum-based materials such as hydrogels and nanosystems in biomedical applications
- Describes gellan gum application in areas like tissue engineering, wound dressing, protein and peptide delivery, and as pharmaceutical excipients in drug delivery
- Offers chapter contributions on gellan gum and its application from an international group of experts in research and industry

DESCRIPTION

Application of Gellan Gum as a Biomedical Polymer details key topics and fundamental aspects of gellan gum and its biomedical applications in drug delivery, proteins and peptides delivery, cell delivery, tissue engineering, wound dressings and enzyme immobilizations in developing high quality products. Sections introduce gellan gum, its source, production and gelation mechanism, discuss biomedical materials, and provides ways it can be used for biomedical applications. The book also examines the used of gellan gum as pharmaceutical excipients for drug delivery. Future developments and challenges round out the book's coverage.

With contributions for an international group of experts, this book is a useful reference for scientists, researchers and those in industry engaged in biomedical product development using natural polysaccharides.



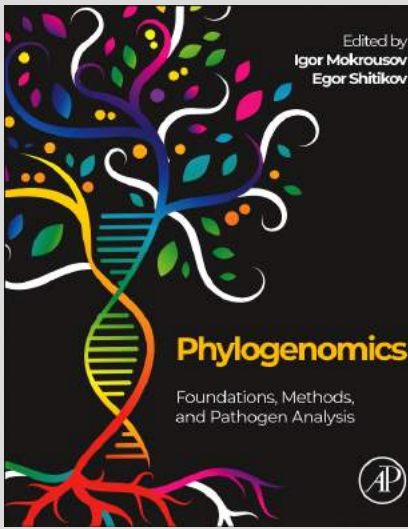
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Phylogenomics

Foundations, Methods, and Pathogen Analysis

Edited by : **Igor Mokrousov**, Head of the Laboratory of Molecular Epidemiology and Evolutionary Genetics, St. Petersburg Pasteur Institute, Russia and **Egor Shitikov**, Head of the Laboratory of Molecular Genetics of Microorganisms, Federal Research and Clinical Center of Physical-Chemical Medicine, Russia

ISBN: 9780323998864
PUB DATE: May 01, 2024
LIST PRICE: £134.00 / \$175.00 / €155.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 484
AUDIENCE: Researchers in Genomics, Genetics, Pathology, Epidemiology, Developmental Biology, Evolutionary Biology, Microbiology, and Immunology, Students and clinicians
BIC CODES: PSAK, PSAK1
THEMA CLASSIFICATION: THEMPSAK

Offers applied, comprehensive instruction in phylogenomics, from the foundations of the field to current methods and pathogen analysis

KEY FEATURES

- Offers a full overview of phylogenetics and phylogenomics, from its foundations to methods and specialized case studies
- Presents methodologies and algorithms for phylogenomic research studies and analyzes medically significant microorganisms
- Considers examples of phylogenomic analysis across a range of medically significant pathogens
- Includes chapter contributions from leading international experts

DESCRIPTION

Phylogenomics: Foundations, Methods, and Pathogen Analysis offers a deep overview of phylogenomics as a field, compelling recent developments, and detailed methods and approaches for conducting new research. Early chapters introduce phylogenomic analysis of viruses and bacteria, deciphering bacterial outbreaks, and evolution of drug resistance and virulence, with a second section on methods offering instruction in tools for SNP calling and dealing with big datasets, use of Bayesian approach in molecular epidemiology, bacterial evolution modeling and evolutionary reconstruction in the presence of mosaic sequences. Part 3 offers various examples of phylogenomic analysis across medically significant bacteria and viruses, including *Yersinia pestis*, *Salmonella*, *Mycobacterium tuberculosis*, HIV-1, measles virus as well as ancient pathogens research.



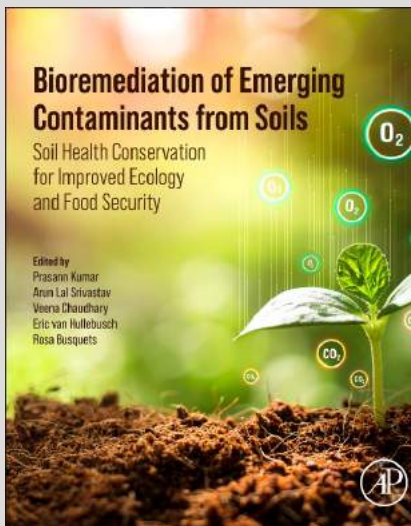
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Bioremediation of Emerging Contaminants from Soils

Soil Health Conservation for Improved Ecology and Food Security

Edited by : **Prasann Kumar**, Assistant Professor, Department of Agronomy, School of Agricultural (ICAR-Accredited), Lovely Professional University, Punjab, India; **Veena Chaudhary**, Associate Professor, Department of Chemistry, Meerut College, Uttar Pradesh, India; **Eric D. van Hullebusch**, Professor, Biogeochemistry of Engineered Ecosystems, Institut de Physique du Globe de Paris, Equipe Biogeochimie a l'Anthropocene des Elements et Contaminants, Emergents (ACE), Paris, France; **Rosa Busquets**, Lecturer in Analytical and Forensic Chemistry, School of Pharmacy and Chemistry, Kingston University, UK and **Arun Lal Srivastav**, Assistant Professor, Chitkara University, Himachal Pradesh, India

ISBN: 9780443139932
PUB DATE: May 01, 2024
LIST PRICE: £115.00 / \$150.00 / €130.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 325

AUDIENCE: Scientists, undergraduate and postgraduate students, researchers, and professors of environmental science, environmental management, environmental engineering, soil science, ecology, environmental chemistry, plant science, agronomy, and food science

BIC CODES: TVK, RBGB, RN, PSAF, RNFF, TDCT

THEMA CLASSIFICATION:

THEMATVB; THEMATVK;
THEMARBGB; THEMATDCT;
THEMAJW; THEMATQ

Contains advances on the bioremediation of emerging contaminants in the soil

KEY FEATURES

- Contains the latest practical and theoretical aspects of the soil health crisis and its management
- Presents collective information to ensure the remediation of soil from emerging contaminants
- Serves as baseline information for environmental issues in agriculture, along with their alternative eco-friendly solutions

DESCRIPTION

Bioremediation of Emerging Contaminants from Soils: Soil Health Conservation for Improved Ecology and Food Security deals with current challenges of sustainable soil health using eco-friendly approaches. This book provides ways of reducing the chemicals burden on the soil by maintaining balance in terms of society, environment and economy, which are considered basic pillars of sustainability. Presented in two parts, the book first highlights emerging contaminants and their sources. The second part explores a variety of steps and tools for addressing contaminated soils including bio- and phytoremediation options. Case studies in each part provide real-world insights for practical application.

This book will be unique in the specified area of sustainability using the principles of bioremediation. Moreover, scientists, researchers, and policymakers will receive insights to develop and explore innovative approaches to achieve sustainable development goals.



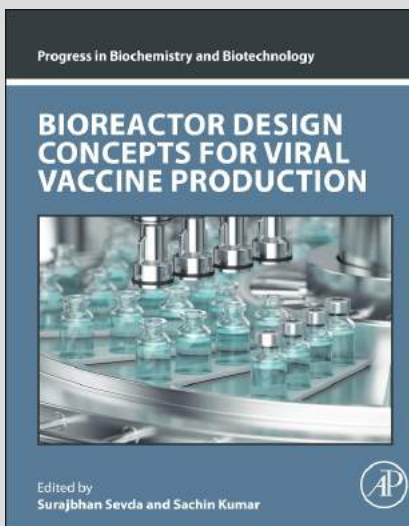
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Bioreactor Design Concepts for Viral Vaccine Production

Edited by : **Surajbhan Sevda**, Assistant Professor at the Department of Biotechnology, National Institute of Technology, Warangal, India and **Sachin Kumar**, MVSc, PhD, Professor, Department of Biosciences and Bioengineering, Indian Institute of Technology Guwahati, Assam, India

ISBN: 9780443153785
PUB DATE: May 01, 2024
LIST PRICE: £142.00 / \$175.00 / €170.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 418
AUDIENCE: Researchers, academics, post-graduate students, and industry professionals of multidisciplinary fields, in particular virology, vaccinology, cell culture and bioreactor design
BIC CODES: PSGL, PSG, TCB
THEMA CLASSIFICATION: THEMAPSG; THEMATCB

Informative resource on bioreactor design and their use for viral vaccine production

A Volume in the *Progress in Biochemistry and Biotechnology Series*

KEY FEATURES

- Covers the fundamentals of bioreactor designs
- Provides strategies for designing a successful vector-based vaccine
- Discusses the applications of biological kinetics, thermodynamics and basic substrate requirements for viral vaccine production

DESCRIPTION

Bioreactor Design Concepts for Viral Vaccine Production covers a range of interdisciplinary chapters from the engineering perspective of bioreactor design to the biotechnological perspectives of vector design for vaccine development. The book covers bioreactor concepts such as static systems, single-use systems, stirred tanks, perfusion, wave and packed-beds. It reviews options for efficient and economical production of human vaccines and discusses basic factors relevant for viral antigen production in mammalian cells, avian cells, and insect cells. This book will be a great resource for those interested in implemented novel bioreactor design or experimental schemes towards intensified or/and enhanced vaccine production.



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Advanced Biologic Drugs and Manufacturing Process

Basanta Kumara Behera, Professor of Biotechnology, three distinguished Indian Universities, India

ISBN: 9780443156403
PUB DATE: May 01, 2024
LIST PRICE: £134.00 / \$175.00 / €155.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 350

AUDIENCE: Scientists and industry professionals working on front lines in biotechnology and biopharmaceutical industries

BIC CODES: PSG

THEMA CLASSIFICATION: THEMAPSG

Highlights how advances in biotechnology, systematic biology, and protein engineering permit large-scale synthesis of biologics in a cost-effective manner

A Volume in the *Developments in Applied Microbiology and Biotechnology Series*

KEY FEATURES

- Gives insights into the conceptual strategic drive for manufacturing innovative, biologically derived therapeutic compounds to launch for commercial purposes
- Focuses on how to execute biopharmaceutical portfolio trends to bring sustainable manufacturing processes per the guidelines of international regulatory acts
- Highlights the emerging trends in medical sciences on tissue engineering, regenerative medicine, personalized medicines, and various innovative technique on immunotherapy to fight against life-threatening diseases

DESCRIPTION

Advanced Biologic Drugs and Manufacturing Process explains biologic drugs, their pharmaceutical charters, and their significance in curing life-threatening chronic diseases. It also provides the latest information on the use of biological drugs for the treatment of numerous diseases and conditions and their most advanced therapies available, including how biologics have impacted cancer therapy, delayed or reversed the course of immune-related conditions, and changed the lives of those with rare chronic diseases. In addition, the book explains how immunotherapy is used for the treatment of diseases by activating or suppressing the immune system.

Scientists working on the front lines in the biotechnology industry are provided with an overview on stable production processes and how to monitor the value chain transfer process of biologic drug for better return, in terms of profit. The book also helps researchers and academics on how to develop and update protocols related to testing, quality control, and quality assurance to obtain highly purified biopharmaceuticals or vaccines.



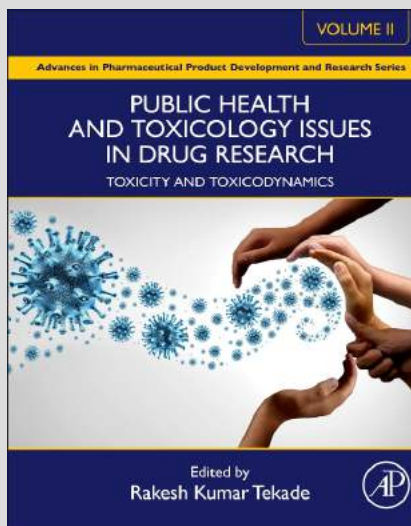
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Public Health and Toxicology Issues in Drug Research, Volume 2

Toxicity and Toxicodynamics

Edited by : **Rakesh Kumar Tekade**, PhD, Assistant Professor, Department of Pharmaceutics, National Institute of Pharmaceutical Education and Research Ahmedabad, Gujarat, India

ISBN: 9780443158421
PUB DATE: May 01, 2024
LIST PRICE: £155.00 / \$200.00 / €175.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 604

AUDIENCE: toxicologists, pharmacists, pharmacologists, physicians, chemist, drug manufacturing establishments, toxicity testing laboratories, medical libraries, poison control units, insurance representatives, safety managers, health care workers, and regulatory authorities

BIC CODES: MMTG, MBN

THEMA CLASSIFICATION: THEMAMKGT; THEMAMBNC

Examines the implications of public health issues and the impact of pharmaceuticals, chemical and food toxicants, dietary phytochemicals, and more

A Volume in the *Advances in Pharmaceutical Product Development and Research Series*

KEY FEATURES

- Discusses the impact of pharmaceuticals, food, and chemical toxicants on human health
- Examines the toxic effects of medical treatments, clinical administrations, and materials
- Explores public health issues around drug safety and toxicology

DESCRIPTION

Public Health and Toxicology Issues in Drug Research: Toxicity and Toxicodynamics, Volume Two examines implications on public health and the impact of pharmaceuticals, chemical and food toxicants, dietary phytochemicals, and medical treatments. The book cover topics on pharmacokinetics and toxicokinetics, such as population pharmacokinetics/toxicokinetics, the design of toxicokinetic studies, and the use of toxicokinetic data in preclinical safety assessments. In addition, it investigates the health effect caused by the bioaccumulation of pharmaceutical and personal care products and the impact of drug-induced toxicity on different systems of the body.

Final sections discuss the mechanistic pathways of food toxicants and illustrate the molecular mechanisms of the chemopreventive role of dietary phytochemicals. Ethical, legal, societal, and professional issues in toxicology round off coverage, making this a valuable resource for anyone interested in learning more about the health impact and public health issues related to the toxicity of pharmaceuticals, dietary supplements, personal care products, and medical treatments.



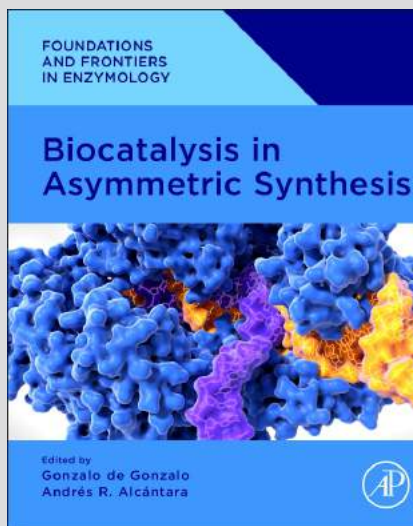
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Biocatalysis in Asymmetric Synthesis

Edited by : **Gonzalo De Gonzalo**, PhD, Associate Professor, Organic Chemistry Department, Chemistry Faculty, University of Seville, Spain and **Andrés R. Alcántara**, PhD, Full Professor at the Department of Chemistry in Pharmaceutical Sciences, Pharmacy Faculty Complutense University of Madrid, Spain

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DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 439
AUDIENCE: Biochemists, biotechnologists, organic chemists, green chemists, biochemical engineers, chemical engineers, Students
BIC CODES: PSB, PHVN, PSBZ, PSD, TCB
THEMA CLASSIFICATION: THEMAPSB; THEMAPHVN; THEMAPSD; THEMATCB

Provides a deep, practical exploration of biocatalysis in asymmetric synthesis, as applied across industries and in sustainable production processes

A Volume in the *Foundations and Frontiers in Enzymology Series*

KEY FEATURES

- Explores biocatalysts as exquisite catalysts for fine chiral compound synthesis in different reaction media
- Features both foundational overviews and applied, practical examples across research and industry
- Includes chapter contributions from international leaders in the field

DESCRIPTION

Biocatalysis in Asymmetric Synthesis, a new volume in the *Foundations and Frontiers of Enzymology* series, offers an applied discussion on synthesizing biological catalysts using asymmetric synthesis for varying applications. Here, global experts in the field analyze a wide variety of biocatalysts and their physical states, process conditions for their asymmetric synthesis, solvents required during synthesis, and even downstream procedures for the recovery of final products. The book adopts an interdisciplinary approach, merging fundamental biology and its synthetic applications across industries with a wide range of practical examples, from directed evolution to biotransformation and production of novel enzymes and non-conventional catalysts. Throughout the book, the impact and application of biocatalysis in sustainable processing is considered in-depth. This book will also help non-experts in biocatalysis to apply this knowledge in their own research, providing a thorough overview of the ways asymmetric biocatalytic approaches may be adapted for different disciplines and downstream products.



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Understanding the Pandemic

Pathophysiology, Transmission and Treatment of COVID-19

Edited by : **Shampa Chatterjee**, PhD, University of Pennsylvania School of Medicine, Philadelphia, PA, USA; **Amaro Nunes Duarte Neto**, Professor, Disciplina de Emergências clínicas, Departamento de Patologia, Faculdade de Medicina, Universidade de São Paulo Brazil, Brazil; **Marco Cascella**, Professor, Anesthesia and Pain Medicine, Istituto Nazionale Tumori, Italy; **Sonia Villapol**, Associate Professor, Neurosurgery Research Institute, Houston Methodist, Weill Cornell Medical College, USA; **Anand Viswanathan**, Associate Professor, Neurology, Harvard Medical School, USA; **Aravind Ganesh**, Assistant professor, Clinical Neurosciences, University of Calgary, Canada; **Ching Lung Lai**, MBBS(Hon) MD FRCP FRCP Edin FRCPG FRACP, Professor of Medicine and Hepatology, University Department of Medicine, Queen Mary Hospital, Hong Kong

ISBN: 9780443191701
PUB DATE: May 01, 2024
LIST PRICE: £126.00 / \$165.00 / €143.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 372
AUDIENCE: Researchers, medical students studying virology and pandemics, public health graduate students researching pandemics, health policy, and response
BIC CODES: PSGL
THEMA CLASSIFICATION: THEMAPSG

Covers COVID-19 and the pandemic, from its virology to immunologic response, treatments, clinical outcomes, risk factors, and global impact

KEY FEATURES

- Discusses coronavirus and their similarities and differences in origin and transmission as well as a review of their structure and mechanisms of action
- Examines the immune-inflammation responses to COVID-19 and the organ-specific impact of the disease
- Covers vaccines and other treatment protocols and public health responses in various geographic locations

DESCRIPTION

Understanding the Pandemic: Pathophysiology, Transmission, and Treatment of COVID-19 aims to cover all aspects of COVID-19 infection from the virus, transmission, pathogenesis, immune-inflammation response, systemic injury, organ damage, associated factors, and comorbidities that drive mortality. Organized into ten sections, the book aims to provide a comprehensive examination of the impact of COVID-19. The book begins a review of coronaviruses, their structure and mechanism of action. The book goes on to discuss the immune response to the virus and its effect on various organs. It examines clinical cases based on an observations and postmortem studies.

Other topics include the long-term effects of COVID-19, vaccines, and public health response.



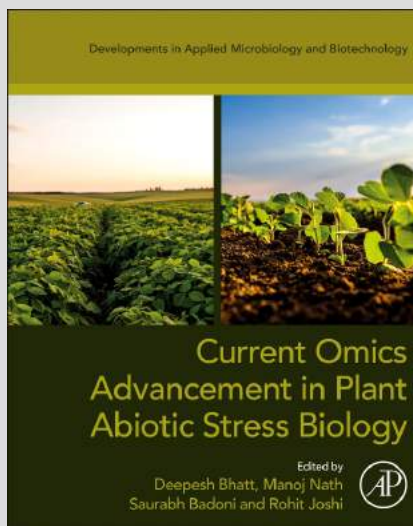
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Current Omics Advancement in Plant Abiotic Stress Biology

Edited by : **Deepesh Bhatt**, Department of Biotechnology, Institute of Computer Education and Applied Science, Gujarat, India; **Manoj Nath**, ICAR, Indian Council of Agricultural Research, Chambaghat, Solan, Himachal Pradesh, India; **Saurabh Badoni**, South Asia Regional Center, Regional Centre (ISARC), Uttar Pradesh, Varanasi, India and **Rohit Joshi**, CSIR-Institute of Himalayan Bioresource Technology, Palampur, Himachal Pradesh, India

ISBN: 9780443216251
PUB DATE: May 01, 2024
LIST PRICE: £134.00 / \$175.00 /
€155.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 191 x 235

PAGES: c. 391

AUDIENCE: Postgraduate and graduate researchers in biochemistry, molecular biology, genetics, molecular breeding, systems biology, agriculture, crops for human foods, biological sciences, plant science, biotechnology, plant physiology and genetics, plant functional genomics, sustainable growth and economy, agrochemical and biological applications for crop protection. industry sectors, Private companies, spin-offs etc. in plant production; Policymakers, stakeholders, associations of plant growers (e.g. European Plant Science Organization)

BIC CODES: TCB

THEMA CLASSIFICATION:
THEMATCB

Provides insights in the integration of multi-OMICS biotechnologies in deciphering molecular intricacies of plant abiotic stress

A Volume in the *Developments in Applied Microbiology and Biotechnology Series*

KEY FEATURES

- Describes biotechnological strategies to combat plant abiotic stress
- Covers the latest evidence based multipronged approaches in understanding omics perspective of stress tolerance
- Focuses on the integration of multi-OMICS technologies in deciphering molecular intricacies of plant abiotic stress

DESCRIPTION

Current Omics Advancement in Plant Abiotic Stress Biology investigates the causal molecular factors underlying the respective mechanisms orchestrated by plants to help alleviate abiotic stress. Despite available knowledge of abiotic stresses in crop plants and high throughput tools and biotechnologies, in this book, a systematic effort has been made for integrating omics interventions across major sorts of abiotic stresses with special emphasis to major food crops infused with detailed mechanistic understanding, which would furthermore help contribute in dissecting the interdisciplinary areas of omics-driven plant abiotic stress biology in a much better manner.

It focuses on the integration of multi-OMICS biotechnologies in deciphering molecular intricacies of plant abiotic stress, namely drought, salt, cold, heat, and heavy metals in major C3 and C4 food crops. Together with this, the book provides updated knowledge of a common and unique set of molecular intricacies playing a vital role in coping up severe abiotic stresses in plants deploying multi-OMICS approaches.



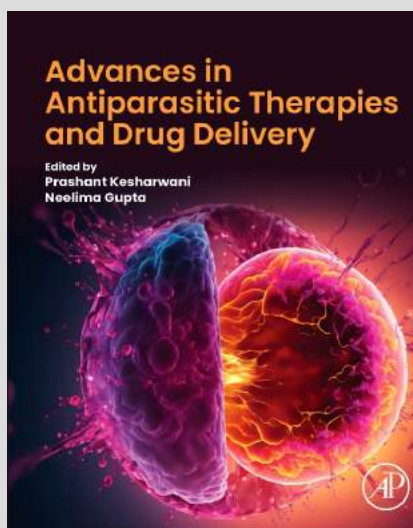
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Advances in Antiparasitic Therapies and Drug Delivery

Edited by : **Prashant Kesharwani**, PhD, Assistant Professor, Department of Pharmaceutics, School of Pharmaceutical Education and Research, Jamia Hamdard, New Delhi, 110062, India and **Neelima Gupta**, Vice Chancellor, Dr. Harisingh Gour Sagar University (A Central University), Sagar, Madhya Pradesh, India

ISBN: 9780443151781
PUB DATE: Nov 21, 2023
LIST PRICE: £134.00 / \$175.00 / €155.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 411
AUDIENCE: (Under)graduate students, researchers and engineers in chemical engineering, materials science, environmental science, and biology
BIC CODES: MMFP
THEMA CLASSIFICATION: THEMAMKFP

Comprehensive reference that presents the basic principles of high gravity reaction engineering and its industrial applications

KEY FEATURES

- Handles high gravity process intensification technology
- Covers theoretical innovation in multiphase reaction intensified by high gravity
- Presents engineering application cases in chemical engineering, materials science, ocean engineering, and environmental engineering
- Provides systematic understanding of high gravity process intensification through theories and industrial applications

DESCRIPTION

Advances in Antiparasitic Therapies and Drug Delivery systematically discusses the fundamentals, principles, and methods of molecular mixing and reaction process intensification. The book demonstrates, in detail, the implementation approach, process, and effectiveness of Hige chemical reaction engineering through novel industrial case studies that help industrial technicians to select reaction intensification technology route more scientifically. Sections cover the innovation and development process of Hige chemical reaction engineering, hydrodynamics behavior in Hige reactors, equipment design principles and methods, multiphase reaction of liquid-liquid, gas-liquid, gas-solid, gas-liquid-solid and reactive crystallization process intensification principles and effectiveness.

The book is a systematic summary of several national award and key projects, such as the State Technological Innovation Award, State Science and Technology Advancement Award, National Natural Science Foundation of China, National key R&D Program of China, National "863" Program of China, National "973" Program of China and also some international cooperation.



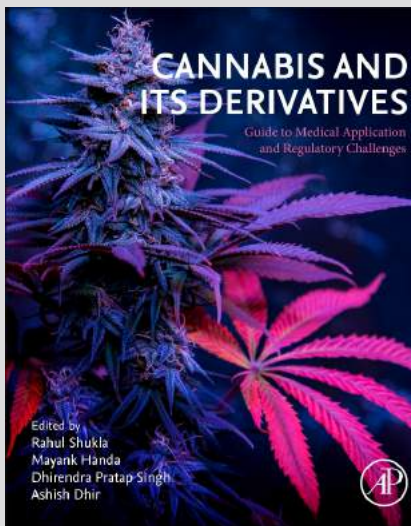
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Cannabis and its Derivatives

Guide to Medical Application and Regulatory Challenges

Edited by : **Rahul Shukla**, PhD, Assistant Professor, Department of Pharmeceutics, National Institute of Pharmaceutical Education and Research, Raebareli, Uttar Pradesh, India; **Mayank Handa**, M.Pharm, National Institute of Pharmaceutical Education and Research-Raebareli, Lucknow, India; **Dhirendra Pratap Singh**, Neurotoxicology and Immunotoxicology Laboratory, ICMR-National Institute of Occupational Health, Ahmedabad, India and **Ashish Dhir**, PhD, Associate Principal Scientist- Drug Discovery, USA

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LIST PRICE: £155.00 / \$200.00 / €175.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 7.50w x 9.25h
PAGES: c. 372
AUDIENCE: Researchers and scientists in Pharmacology, and clinical researchers, Drug development corporate researchers
BIC CODES: PSA
THEMA CLASSIFICATION: THEMAPS

A complete reference on the clinical pharmacology of Cannabis derivatives and their regulatory frameworks

KEY FEATURES

- Explores the potential of Cannabis derivatives and medicinal properties in several medical fields
- Highlights the regulatory challenges around the clinical use and research of Cannabis
- Covers applications to conditions like cancer, neurological disorders, pain management, and interactions with other drugs

DESCRIPTION

Cannabis and its Derivatives: Guide to Medical Application and Regulatory Challenges summarizes the current state of research and clinical pharmacology of cannabis-based therapeutics, along with associated regulatory frameworks. Sections cover historical, botanical, and taxonomical platforms of cannabis, chemical derivatives of the cannabis plant, a literature review of therapeutic applications, the biological fate of cannabis and its metabolic products, pain management, neurological disorders, cancer management, interactions with other drugs, veterinary applications, and the adverse effects of Cannabis overuse in humans. The book's final section is devoted to discussions around regulatory challenges and future considerations. This is the ideal reference pharmaceutical scientists, clinicians, and academic researchers who want access to updated information on the therapeutic applications of cannabis and its derivatives. Corporate researchers will also benefit from this book's presentation of the associated regulatory environment.



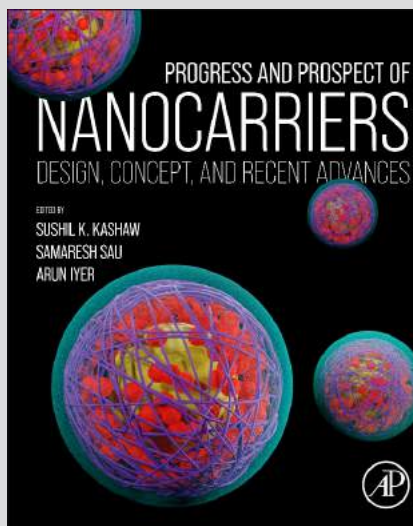
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LIFE SCIENCES Pharmacology

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Progress and Prospect of Nanocarriers

Design, Concept, and Recent Advances

Edited by : **Sushil K. Kashaw**, Associate Professor, Department of Pharmaceutical Sciences, Dr. Harisingh Gour University, Sagar, India; **Samaresh Sau**, Assistant Professor, Department of Pharmaceutical Sciences, Wayne State University, Detroit, Michigan, USA and **Arun Iyer**, Assistant Professor, Eugene Appelbaum College of Pharmacy and Health Sciences and Scientific Member, Molecular Therapeutics Program, Barbara Ann Karmanos Cancer Institute, Wayne State University, Detroit, Michigan, USA

ISBN: 9780128199794
PUB DATE: May 01, 2024
LIST PRICE: £135.00 / \$175.00 / €155.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 298

AUDIENCE: Researchers and students in the field of biomaterials, drug delivery, and nanomedicine, scientists and engineers in industrial disciplines of drug delivery and drug formulation

BIC CODES: MMG, MFCC, MJD, KNDP, TCB

THEMA CLASSIFICATION:

THEMAMF; THEMAMKG;
THEMAMJD; THEMAKND;
THEMATCB

Comprehensive discussion of the design and therapeutic potential of multiple nanocarrier platforms

KEY FEATURES

- Focuses on multiple nanocarrier platforms
- Examines the different technologies that have improved drug delivery and suggests where the technology is headed
- Written for researchers and students by diverse experts in biomaterials, drug delivery and nanomedicine

DESCRIPTION

Progress and Prospect of Nanocarriers: Design, Concept, and Recent Advances examines the different nanocarriers that are currently being developed for specific applications in biomedical drug delivery, disease management, diagnosis and therapy. Nanosized drug delivery systems have gained tremendous amounts of clinical interest due to their effective bio-distribution and enhanced pharmacokinetic and selective targeting capability which results in high therapeutic potential, low side effects, and the generation of cost-effective drug delivery systems. Numerous effective nanocarriers have been evolving, including polymeric nanoparticles, liposomes, microspheres, dendrimers, and carbon nanotubes. This book is a helpful reference for scientists and students in the fields of drug delivery, biomaterials and nanomedicine, as well as scientists and engineers in industrial disciplines of drug delivery and drug formulation.



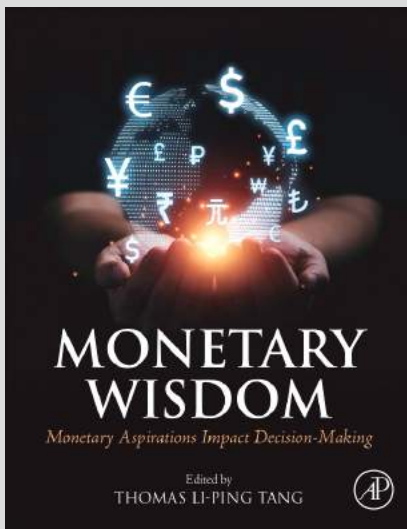
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LIFE SCIENCES Pharmacology

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Monetary Wisdom

Monetary Aspirations Impact Decision-Making

Edited by : **Thomas Li-Ping Tang**, Professor in the Management Department at the Jennings A. Jones College of Business, Middle Tennessee State University (MTSU).

ISBN: 9780443154539
PUB DATE: May 01, 2024
LIST PRICE: £115.00 / \$150.00 / €130.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 279
AUDIENCE: Graduate students, researchers in the field of applied psychology, Industrial/organizational psychology, behavioral economics
BIC CODES: JP SL, JM J
THEMA CLASSIFICATION: THEMAJM; THEMAJMJ

An innovative, multidisciplinary perspective on decision-making and money

KEY FEATURES

- Examines how monetary values frame everyday decisions
- Provides an innovative and cross-cultural view of monetary decisions
- Reviews how monetary values affect behaviors in leadership and organizations

DESCRIPTION

Globalization creates economic prosperity for citizens around the world. It changes people's deep-rooted attitudes, values, and behavioral patterns. Editor Thomas Li-Ping Tang is the first to scientifically capture the meaning of money and coin the contemporary love of money construct. Ardent monetary aspirations involve affective, behavioral, and cognitive subconstructs.

Monetary Wisdom: Monetary Aspirations Impact Decision-Making bridges the gaps between behavioral economics, business ethics, decision-making, and the psychology of money. It compiles research from world-renowned experts in 37 countries across six continents. This book presents an excellent collection of innovative and multicultural views.

Monetary Wisdom investigates how individuals apply monetary aspirations as a lens, frame critical concerns at the proximal and omnibus contexts, and maximize expected utility and ultimate serenity at the individual, organizational, and global levels. The books' practical implications help readers apply and enjoy these discoveries' benefits.



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LIFE SCIENCES Psychology

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COVER IMAGE
FORTHCOMING

Muscle Stem Cells, Vol 158

Edited by : **Jeffrey Dilworth**, University of Essex and **Michael Rudnicki**

ISBN: 9780128234358
PUB DATE: May 01, 2024
LIST PRICE: £128.00 / \$210.00 /
€150.00
DISCOUNT: Serial
FORMAT: Hardback
TRIM: 6.00w x 9.00h
PAGES: c. 337
AUDIENCE: Researchers and
students
BIC CODES: PST
THEMA CLASSIFICATION:
THEMAPST

Edited by one of the best scientists in the field, this series presents the latest updates in the field of developmental biology

KEY FEATURES

- Provides the authority and expertise of leading contributors from an international board of authors
- Presents the latest release in the *Current Topics in Developmental Biology* series
- Updated release includes the latest information on the *Muscle Stem Cells*

DESCRIPTION

Muscle Stem Cells, Volume 158 in the *Current Topics in Developmental Biology* series, highlights new advances in the field, with this new volume presenting interesting chapters on topics surrounding Muscle stem cell dysfunction in rhabdomyosarcoma and muscular dystrophy, Model systems used to study MuSC function, MuSCs in the growth and maintenance of muscle, Molecular regulation of myocyte fusion, A self-made quiescent niche of muscle stem cells, Characterization of the muscle regenerative environment, Role of microenvironment on muscle stem cell function in health, adaptation, and disease, Vascular Niche for Muscle Stem Cells, Regulation of muscle stem cell polarity in health and disease, and more.

Additional chapters cover Circadian timing of satellite cell function and muscle regeneration, Muscle stem cell activity is regulated by translational control of gene expression, Biomechanical stress in modulating MuSC function, Cross talk between cell types in regenerating muscle, Effects of the immune system on muscle regeneration, Effects of diabetes on MuSC function, and other timely topics.



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SERIALS Biochemistry, Genetics & Molecular Biology

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COVER IMAGE
FORTHCOMING

Advances in Cytometry: Applications, Vol 186

Edited by : **J. Paul Robinson**, Director of the Purdue University Cytometry Laboratories and Professor of Basic Medical Science and Biomedical Engineering, Purdue University, IN, USA.; **Pratip Chattopadhyay**, New York University Langone Health, New York, NY, USA and **James Jacobberger**, Professor Emeritus at Case Western Reserve University, Cleveland, OH, USA

ISBN: 9780323994194
PUB DATE: May 01, 2024
LIST PRICE: £139.00 / \$175.00 /
€160.00
DISCOUNT: Serial
FORMAT: Hardback
TRIM: 6.00w x 9.00h
PAGES: c. 290
AUDIENCE: Academic, researchers,
government and industrial sectors
BIC CODES: PSF, PSC, PSD
THEMA CLASSIFICATION:
THEMAPSF; THEMAPSC;
THEMAPSD

Edited by one of the best scientists in the field, this series presents the latest updates in the field of cell biology

KEY FEATURES

- Provides the authority and expertise of leading contributors from an international board of authors
- Presents the latest release in the Methods in Cell Biology series
- Includes the latest information on the topic of development, characterization and applications in CAR T Cells

DESCRIPTION

Advances in Cytometry: Applications, Volume 176 in the Methods in Cell Biology series, highlights advances in the field, with this new volume presenting interesting chapters on timely topics, including Orthotopic brain tumor models derived from glioblastoma stem-like cells, RNA sequencing in hematopoietic stem cells, Generation of inducible pluripotent stem cells from human dermal fibroblasts, In vitro preparation of dental pulp stem cell grafts combined with biocompatible scaffolds for tissue engineering, Gene expression knockdown in chronic myeloid leukemia stem cells, Identification and isolation of slow-cycling GSCs, Assessment of CD133, EpCAM, and much more.



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COVER IMAGE
FORTHCOMING

Overview of Inflammatory Breast Cancer: Updates, Vol 384

Edited by : **Marwa Manai**, Weill Cornell Medicine, Department of Medicine, Division of hematology-oncology, NY, USA; **Massimo Cristofanilli**, Department of Medicine, Weill Cornell Medicine, 1300 York Ave, New York, NY, 10021 and **Hamouda Boussem**, Medical oncology service , Hospital of Ariana, Ariana, Tunisia

ISBN: 9780443133480

PUB DATE: May 01, 2024

LIST PRICE: £165.00 / \$239.00 / €171.00

DISCOUNT: Serial

FORMAT: Hardback

TRIM: 6.00w x 9.00h

PAGES: c. 260

AUDIENCE: Academic, government and industrial sectors

BIC CODES: PSF, PSC, PSD

THEMA CLASSIFICATION:

THEMAPSF; THEMAPSC;

THEMAPSD

Edited by one of the best scientists in the field, this series presents the latest updates in the field

KEY FEATURES

- Provides the authority and expertise of leading contributors from an international board of authors
- Presents the latest release in International Review of Cell and Molecular Biology
- Updated release includes the latest information on Overview of Inflammatory Breast Cancer and Updates

DESCRIPTION

International Review of Cell and Molecular Biology, Volume 381 highlights new advances in the field, with this new volume presenting interesting topic on *Overview of Inflammatory Breast Cancer: Updates*.



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SERIALS Biochemistry, Genetics & Molecular Biology

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COVER IMAGE
FORTHCOMING

Motor Neurone Disease, Vol 176

Edited by : **Pamela J. Shaw**, MD, Professor of Neurology, Academic Neurology Unit, Division of Genomic Medicine, University of Sheffield, Sheffield, UK and **Janine Kirby**, Professor in Neurogenetics Department of Neuroscience University of Sheffield

ISBN: 9780443141164
PUB DATE: May 01, 2024
LIST PRICE: £145.00 / \$210.00 / €150.00
DISCOUNT: Serial
FORMAT: Hardback
TRIM: 6.00w x 9.00h
PAGES: c. 300
AUDIENCE: Undergraduates, graduates, academics, and researchers in the field of motor neuron disease
BIC CODES: PSAN, MJN
THEMA CLASSIFICATION: THEMAPSAN; THEMAMKJ

Edited by some of the best scientists in the field, this series presents the latest updates in the field of neurobiology

KEY FEATURES

- Provides the authority and expertise of leading contributors from an international board of authors
- Presents the latest release in *International Review on Neurobiology* series
- Updated release includes the latest information on Motor Neuron Disease

DESCRIPTION

Motor Neurone Disease, Volume 176 in the *International Review in Neurobiology* serial highlights new advances, with this new volume presenting interesting chapters written by an international board of authors. Updates include chapters on Clinical features, differential diagnosis and pathology, Recent advances in genetics of familial and sporadic ALS, Non-coding genome contribution to ALS, Contribution of neurophysiology to the diagnosis and monitoring ALS, Advances in symptom management and monitoring disease progression, Use of biomarkers in clinical trials and future developments that will help identify new biomarkers, Application of systems biology to identify therapeutic targets, and much more.

Additional sections cover Evidence of mitochondrial dysfunction (in ALS) and how to measure it in model systems, Current neuroprotective therapies and future prospects, The role of glial cells in ALS, Dysregulation of RNA biology in ALS, New developments in pre-clinical models of ALS to guide translation.



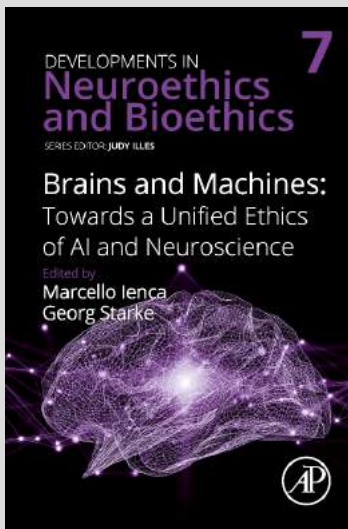
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SERIALS Neuroscience

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Brains and Machines: Towards a unified Ethics of AI and Neuroscience, Vol 7

Edited by : **Marcello lenca** and **Georg Starke**

ISBN: 9780443158698
PUB DATE: May 01, 2024
LIST PRICE: £135.00 / \$215.00 / €155.00

DISCOUNT: Serial

FORMAT: Hardback

TRIM: 6.00w x 9.00h

PAGES: c. 280

AUDIENCE: A academic audience working on the ethics of AI and neuroscience but is also of interest to anyone who would like to get an introduction into these scientific debates

BIC CODES: PSAN, MJN

THEMA CLASSIFICATION: THEMAPSAN

Brings together conceptual and ethical debates at the intersection of AI and neuroscience and suggests a way towards finding common ground

KEY FEATURES

- Provides complementary perspectives from international experts on neuroscience, AI and ethics
- Searches for common ground in debates that have in the past often moved in parallel
- Provides an introduction into current ethical debates at the intersection of two fast-moving key technologies

DESCRIPTION

Brains and Machines: Towards a unified Ethics of AI and Neuroscience provides a comprehensive overview of concepts and ethical issues at the intersection of two emerging technological trends in the 21st century: AI and neurotechnology. In line with recent advances across both fields, debates about philosophical, ethical, regulatory and social issues raised by neuroscience and AI have considerably expanded in the past decade. Yet, despite many intersections and fruitful interactions between the two scientific domains, ethical debates about neuroscience and AI have mostly moved in parallel. This volume assembles voices from various disciplines to provide a more unified view and offer novel perspectives on two complementary lines of discourse. The volume provides scientific background by outlining the state of the art of applying AI in the field of neuroscience and discussing instances where findings and debates from neuroscience provide cues and inspiration to the study of AI. Based on this background, the book then addresses conceptual frameworks, identifies ethical challenges at the intersection of neuroscience and AI, and highlights challenges and opportunities of finding common ground in interdisciplinary settings.



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SERIALS Neuroscience

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COVER IMAGE
FORTHCOMING

Nucleic acid associated mechanisms in immunity and disease, Vol 161

Edited by : Jayanta Chaudhuri and Uttiya Basu

ISBN: 9780443188947
PUB DATE: May 01, 2024
LIST PRICE: £135.00 / \$193.00 / €138.00
DISCOUNT: Serial
FORMAT: Hardback
TRIM: 6.00w x 9.00h
PAGES: c. 190
AUDIENCE: Immunologists and infectious disease specialists, cell biologists and hematologists
BIC CODES: MJCM
THEMA CLASSIFICATION: THEMAMJCM

Long-running serial that continually publishes cutting-edge reviews on the latest advancements in the field of immunology

A Volume in the *Advances in Immunology* Series

KEY FEATURES

- Presents current developments and comprehensive reviews in immunology
- Provides the latest in a longstanding and respected serial on the subject matter
- Focuses on recent advances in immunology

DESCRIPTION

Advances in Immunity volume 161 highlights new advances in the field, with this new volume presenting interesting chapters. Each chapter is written by an international board of authors.



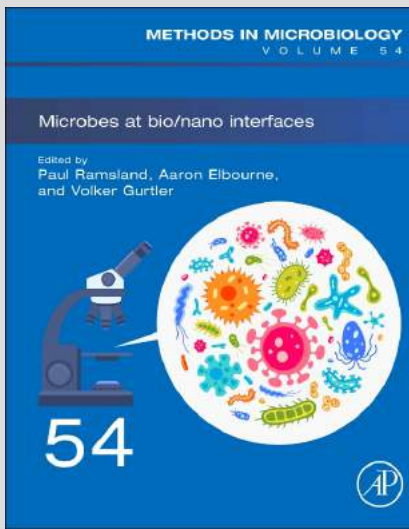
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SERIALS Immunology & Microbiology

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Microbes at Bio/Nano Interfaces, Vol 54

Edited by : **Paul Ramsland**, Associate Professor, RMIT University; **Aaron Elbourne**, Postdoctoral Research Fellow, RMIT University and **Volker Gurtler**, Adjunct Professor, RMIT University, Melbourne, Australia

ISBN: 9780443191190

PUB DATE: May 01, 2024

LIST PRICE: £139.00 / \$201.00 /

€144.00

DISCOUNT: Serial

FORMAT: Hardback

TRIM: 6.00w x 9.00h

PAGES: c. 286

AUDIENCE: Researchers, students, and academics in the field of virus research

BIC CODES: PSD, PSB, PHVN, PSG

THEMA CLASSIFICATION:

THEMAPSD; THEMPSB;

THEMAPHVN; THEMPSG

Edited by some of the best scientists in the field, this series presents the latest updates in the field of virus research

A Volume in the *Methods in Microbiology* Series

KEY FEATURES

- Provides the authority and expertise of leading contributors from an international board of authors
- Presents the latest release in *Advances in Virus Research* serials
- Updated release includes the latest information on *Microbes at bio/nano interfaces*

DESCRIPTION

Microbes at Bio/Nano Interfaces, Volume 54 in the *Advances in Virus Research* series, highlights new advances in the field, with this new volume presenting interesting chapters on a variety of hot topics, including Advanced Hydrogel for Management of Bacterial Wound Infections, Biofilm Characterization: Imaging, analysis and considerations, Parasitic worm interactions with host molecular machinery, Investigation of microbes and surface carbohydrates using Atomic Force Microscopy, Interactions Between Microbial Cells and Titanium Implant Surfaces, Targeting Bacterial Polysaccharides with Antibodies and Vaccines, and much more.

Other sections cover Using next generation sequencing to study host-pathogen interactions, Microbial Nano-Biosynthesis: Biomedical, Food and Environmental Applications, and Functional co-expression of LEA peptides: Providing an environment for efficient cellular recombinant protein expression.



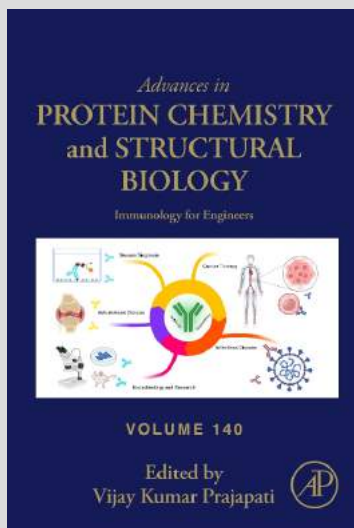
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SERIALS Immunology & Microbiology

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Immunology for Engineers, Vol 140

Vijay Kumar Prajapati, Assistant Professor, Department of Biochemistry, School of Life Sciences, Central University of Rajasthan, Kishangarh, Ajmer, Rajasthan, India

ISBN: 9780443193507
PUB DATE: May 01, 2024
LIST PRICE: £119.00 / \$171.00 / €122.00
DISCOUNT: Serial
FORMAT: Hardback
TRIM: 6.00w x 9.00h
PAGES: c. 476

AUDIENCE: Post-graduate students and early career researcher.
BIC CODES: PSB, PNN, PSD, PHVN
THEMA CLASSIFICATION: THEMAPPN; THEMAPPB; THEMAPPD; THEMAPPV

Updaters on translational bioinformatics, an emerging field, providing a solution for biomedical research

KEY FEATURES

- Presents the latest in immunological engineering
- Delves into timely topics such as antibody engineering
- Covers vaccine engineering amongst many other important topics

DESCRIPTION

Immunology for Engineers, Volume 140 consists of chapters from stalwarts of the field, covering topics such as antibody engineering, adjuvant requirement and its methodology for assessment, and the need to develop immunotherapy, etc. Chapters covered in this volume discuss Current Status and Future Prospective of Breast Cancer Immunotherapy, Engineering high affinity antigen binders- beyond antibodies, Platelets and Inter-Cellular Communication in Immune Responses: Dialogue with both Professional and Non-Professional Immune Cells, Chimeric Antigen Receptor (CAR) T cell-based cancer immunotherapy: A boon for cancer-free life, and Molecular insights and promise of Oncolytic Virus based Immunotherapy.



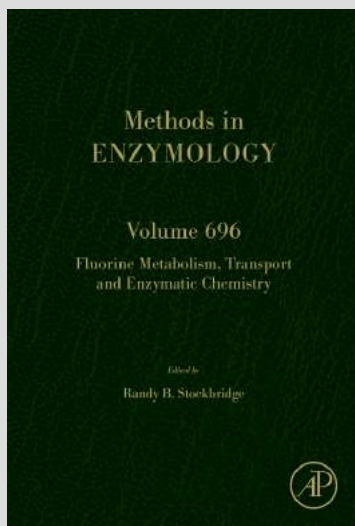
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SERIALS Biochemistry, Genetics & Molecular Biology

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Fluorine Metabolism, Transport and Enzymatic Chemistry, Vol 696

Edited by : **Randy Stockbridge**, Associate Professor, Department of Molecular, Cellular, and Developmental Biology, University of Michigan, Ann Arbor, MI, USA

ISBN: 9780443236433
PUB DATE: May 01, 2024
LIST PRICE: £138.00 / \$199.00 / €142.00
DISCOUNT: Serial
FORMAT: Hardback
TRIM: 6.00w x 9.00h
PAGES: c. 400
AUDIENCE: Academic, government and industrial sectors
BIC CODES: PSB, PSD
THEMA CLASSIFICATION: THEMAPSB; THEMAPSD

Edited by one of the best scientists in the field, this series presents the latest updates in the field of enzymology

KEY FEATURES

- Provides the authority and expertise of leading contributors from an international board of authors
- Presents the latest release in *Methods in Enzymology* series
- Updated release includes the latest information on Fluorine Metabolism, Transport, and Enzymatic Chemistry

DESCRIPTION

Fluorine Metabolism, Transport and Enzymatic Chemistry, Volume 696 in the *Methods in Enzymology* series, highlights new advances in the field, with this new volume presenting interesting topics on Fluorine Metabolism, Transport, and Enzymatic Chemistry. Chapters in this new release include Determination of fluoride sensitivity and resistance in oral biofilm models, NMR methods to detect fluoride binding and transport by membrane proteins, Biotransformation of fluorinated drugs and xenobiotics by the model fungus *Cunninghamella elegans*, Measurement of fluoride efflux from lipid vesicles and cells, Defluorination of PFAS by *Acidimicrobium* sp. A6 and Potential Applications for Remediation, and more.

Additional chapters cover Computational approaches to investigate F- binding, selectivity and transport in F- exporters, Defluorination as a key trait to gauge the biodegradability of fluorinated pollutants: challenges and opportunities, Patch-Clamp Electrophysiology of Fluoride Channels in *Saccharomyces cerevisiae*, and Synthesis of fluorophenylalanine-encoded proteins in HEK cells.



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SERIALS **Methods in Enzymology**

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COVER IMAGE
FORTHCOMING

Advances in Organometallic Chemistry, Vol 81

Pedro J. Perez, Professor in Inorganic Chemistry, Homogeneous Catalysis Laboratory, Center for Research in Sustainable Chemistry, Universidad de Huelva, Huelva, Spain

ISBN: 9780443294204

PUB DATE: May 01, 2024

LIST PRICE: £155.00 / \$222.00 / €159.00

DISCOUNT: Serial

FORMAT: Hardback

TRIM: 6.00w x 9.00h

PAGES: c. 180

AUDIENCE: International Research Community, Industry Professionals, Academic Institutions

BIC CODES: PNN, PN

THEMA CLASSIFICATION:

THEMAPNN; THEMAPN

Edited by one of the best scientists in the field, this series presents the latest updates in the field of organometallic chemistry

KEY FEATURES

- Provides the latest information on cancer research
- Offers outstanding and original reviews on a range of cancer research topics
- Serves as an indispensable reference for researchers and students alike

DESCRIPTION

Advances in Organometallic Chemistry, Volume 81 in this ongoing series, highlights new advances in the field, with this new volume presenting interesting chapters written by an international board of authors. Specific chapters cover Recent Advances in the Catalytic Applications of NHC-Early Abundant Metals (Fe, Mn, Co) Complexes, A Guide to Non-Carbonyl, Non-Isocyanato Organometallic Chemistry of Technetium-99 from Discovery to 2023, and Cyclopentadienyl, Amidinate (CPAM) Complexes of Groups 4 - 6 Transition Metals.



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SERIALS Chemistry & Chemical Engineering

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COVER IMAGE
FORTHCOMING

Advances in the Study of Behavior, Vol 56

Susan Healy, School of Biology, Harold Mitchell Building, University of St Andrews, UK and
Jeffrey Podos, Department of Biology, University of Massachusetts Amherst, MA, USA

ISBN: 9780443294402

PUB DATE: May 01, 2024

LIST PRICE: £106.00 / \$153.00 /

€110.00

DISCOUNT: Serial

FORMAT: Hardback

TRIM: 6.00w x 9.00h

PAGES: c. 350

AUDIENCE: Academic, government
and industrial sectors

BIC CODES: MMJ, JMM, JM

THEMA CLASSIFICATION:

THEMAMKM; THEMAJMM;

THEMAJM

Edited by two of the best scientists in the field, this series presents the latest updates on Advances in the Study of Behavior

KEY FEATURES

- Provides the authority and expertise of leading contributors from an international board of authors
- Presents the latest release in Advances in the Study of Behavior
- Updated release includes the latest information on behavior

DESCRIPTION

Advances in the Study of Behavior, Volume 56 highlights new advances in the field, with this new volume presenting interesting chapters on a variety of interesting topics, including Playing to the crowd: using *Drosophila* to dissect mechanisms underlying plastic male strategies in sperm competition games, Social breeding and its challenges: A case study on village weaverbirds, Inbreeding depression and social interactions, Sleeping beauties? Copulatory quiescence in arachnid females, and more.



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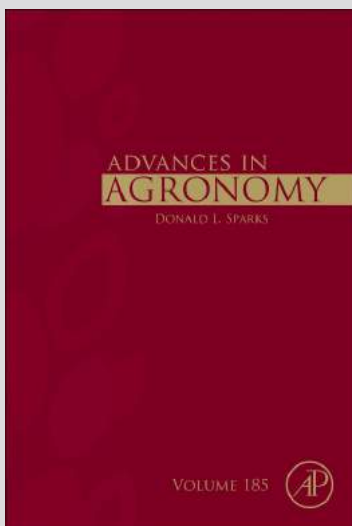
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SERIALS Psychology

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Advances in Agronomy, Vol 185

Donald L. Sparks, Director, Delaware Environmental Institute, University of Delaware, Newark, DE, USA

ISBN: 9780443295263
PUB DATE: May 01, 2024
LIST PRICE: £135.00 / \$193.00 / €138.00

DISCOUNT: Serial

FORMAT: Hardback

TRIM: 6.00w x 9.00h

PAGES: c. 275

AUDIENCE: Scientists and practitioners in academe, government, and industry and students in an array of fields including crop and soil sciences, agronomy, plant biology, and environmental sciences

BIC CODES: TV, PST, PSA, RNC, RN

THEMA CLASSIFICATION:

THEMATV; THEM PST; THEM APS;
THEMAPSAF; THEMATQ

Highly cited serial review that includes cutting-edge information on the crop and soil sciences and the latest agronomy research

KEY FEATURES

- Includes numerous, timely, state-of-the-art reviews on the latest advancements in agronomy
- Features distinguished, well recognized authors from around the world
- Builds upon this venerable and iconic review series
- Covers the extensive variety and breadth of subject matter in the crop and soil sciences

DESCRIPTION

Advances in Agronomy, Volume 185, the latest release in this leading reference on agronomy, contains a variety of updates and highlights new advances in the field, each written by an international board of authors.



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SERIALS Agricultural & Biological Sciences

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COVER IMAGE
FORTHCOMING

Advances in Applied Microbiology, Vol 126

Geoffrey M. Gadd, Professor, University of Dundee, Scotland, UK and **Sima Sariaslani**, DuPont Central Research and Development, Wilmington, DE, USA

ISBN: 9780443295607

PUB DATE: May 01, 2024

LIST PRICE: £98.50 / \$142.00 /
€102.00

DISCOUNT: Serial

FORMAT: Hardback

TRIM: 6.00w x 9.00h

PAGES: c. 216

AUDIENCE: All those who deal with today's microbiology in the Medical and Biotechnological arena

BIC CODES: TCB, PSF, PSG

THEMA CLASSIFICATION:

THEMATCB; THEMPSF

Provides timely reviews of topics in microbiology, presenting an invaluable inference

KEY FEATURES

- Contains contributions from leading authorities in the field
- Informs and updates on the latest developments in the field of microbiology
- Includes discussions on the role of specific molecules in pathogen life stages, interactions, and much more

DESCRIPTION

Advances in Applied Microbiology, Volume 126 continues the comprehensive reach of this widely read and authoritative review source in microbiology where users will find invaluable references and information on a variety of areas relating to the topics of microbiology.



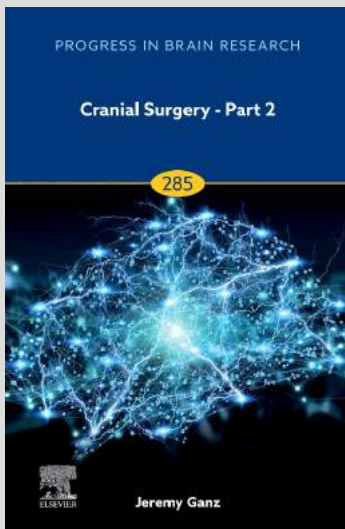
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SERIALS Immunology & Microbiology

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Cranial Surgery - Part 2, Vol 285

Jeremy C. Ganz, Ulverston, UK

ISBN: 9780443317187

PUB DATE: May 01, 2024

LIST PRICE: £199.95 / \$288.00 / €206.00

DISCOUNT: Serial

FORMAT: Hardback

TRIM:

PAGES: c. 350

AUDIENCE: Neurosurgeons, Medical and Surgical Historians, Medical Illustrators, University Libraries, Neurosurgical and Surgical Societies

BIC CODES: PSAN, JMM

THEMA CLASSIFICATION: THEMAPSAN; THEMAJMM

This is the first book to emphasize the role of images in the history of surgery

KEY FEATURES

- Cranial Surgery
- Printing and Images
- Surgeons Conservatism

DESCRIPTION

This is a study of the evolution of the principles and techniques of cranial surgery from Hippocrates to the nineteenth century. The methods of conveying information by text and image are considered.



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SERIALS Neuroscience

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COVER IMAGE
FORTHCOMING

Elastomer-Based Composites and Nanocomposites

Fundamentals, Recycling and Applications

Edited by : **Hamid Essabir**, Head, Department of Mechanical and Civil Engineering, National School of Applied Sciences, Agadir, Morocco; **Rachid Bouhfid**, Moroccan Foundation for Advanced Science, Innovation and Research (MAScIR) and **Abou el Kacem Qaiss**, Director of Polymer Processing Laboratory, Institute of Nanomaterials and Nanotechnology (Nanotech), Rabat, Morocco

ISBN: 9780443188688

PUB DATE: Oct 01, 2024

LIST PRICE: £185.00 / \$245.00 /

€215.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 6.00w x 9.00h

PAGES: c. 418

AUDIENCE: Academic and industrial researchers, materials scientists and engineers, and chemists working in the development of polymer materials and elastomer-based composites

BIC CODES: TDCP, TDCQ

THEMA CLASSIFICATION: THEMATDPF; THEMATGM;

THEMATGMP

Provides a broad updated review on the main innovations in elastomer-based composite materials and their industrial applications

A Volume in the *Woodhead Publishing Series in Composites Science and Engineering Series*

KEY FEATURES

- Includes case studies on challenges and solutions based on academic and industrial collaborations
- Provides insights into future and applied research from both academic and commercial perspectives
- Covers filler-matrix adhesion and modification procedures to improve performance
- Provides a wide range of nanofillers, their characterization and impact on final application

DESCRIPTION

Elastomer-Based Composite and Nanocomposites: Fundamentals, Recycling and Applications provides an updated review of the main innovations in this important research field. The book's chapters are written by well-known scholars and leading industrial experts from around the globe. Key aspects covered include properties and applications of reinforcement agents, filler morphology, synthesis, functionalization, processing and characterization of the resulting composites and their structural, mechanical, thermal, and rheological properties. The book will be an essential reference resource for academic and industrial researchers, materials scientists and engineers, and chemists working in the development of polymer materials and elastomer-based composites.



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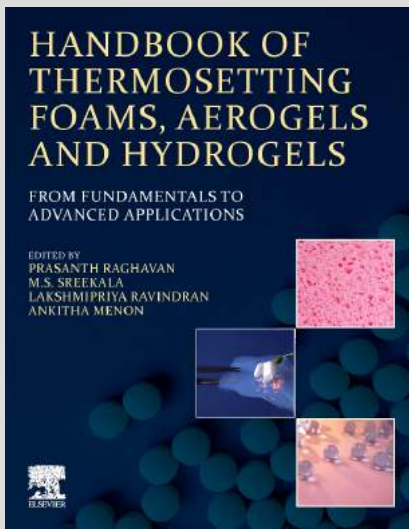
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Handbook of Thermosetting Foams, Aerogels, and Hydrogels

From Fundamentals to Advanced Applications

Edited by : **Prasanth Raghavan**, Professor, Department of Polymer Science and Rubber Technology, Cochin University of Science and Technology (CUSAT), India; Visiting Professor, Department of Materials Engineering and Convergence Technology, Gyeongsang National University, South Korea; Associate Faculty Professor, Inter-university Centre for Nanomaterials and Devices, Cochin, India; **M.S. Sreekala**, Associate Professor, School of Chemical Sciences, Mahatma Gandhi University, Kottayam, Kerala, India, and Joint Director, International and Inter-University Centre for Nanoscience and Nanotechnology and School of Nanoscience and Technology, Mahatma Gandhi University, Kottayam, Kerala, India

ISBN: 9780323994521
PUB DATE: May 01, 2024
LIST PRICE: £210.00 / \$270.00 / €235.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 642

AUDIENCE: Researchers and advanced students with an interest in thermoset materials or lightweight materials, and across polymer science, chemistry, materials science, and engineering, R&D professionals, engineers, and scientists working with foams, hydrogels, and aerogels for a range of applications and industries (e.g. automotive & aerospace, biomedicine, defense, etc.)

BIC CODES: TDCP, MQW, TCB, TGM

THEMA CLASSIFICATION:

THEMATDCP; THEMATGMP;

THEMATDPF; THEMATCB;

THEMATGM; THEMAMQW

A comprehensive guide to thermoset foams, aerogels, and hydrogels, covering fundamentals, preparation, properties, applications, challenges and the state-of-the-art

KEY FEATURES

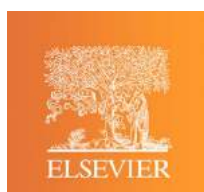
- Provides methodical coverage of polyurethane, epoxy and formaldehyde-based foams, aerogels and hydrogels
- Explores a range of high value applications across automotive and aerospace, defense, biomedicine, and other areas
- Considers challenges in design, processing and implementation, along with environmental aspects such as biodegradability and recyclability

DESCRIPTION

Handbook of Thermosetting Foams, Aerogels, and Hydrogels: From Fundamentals to Advanced Applications presents the latest on the preparation, characterization, properties and applications of thermoset foams, aerogels and hydrogels. The book begins by introducing each of these concepts and their characteristics, current applications, potential for further development, and environmental impacts. This is followed by three sections, each focusing on foams, aerogels and hydrogels developed from a specific thermosetting polymer category, covering polyurethane, epoxy resins and formaldehyde. In each section, detailed coverage includes preparation, structure, characterization, properties, processing and applications based on material, along with key challenges in design, processing, implementation and solutions. This is a valuable resource for researchers and advanced students with an interest in thermoset lightweight materials across the disciplines of polymer science, chemistry, nanotechnology, materials science and engineering. The book will also be of interest to R&D professionals, engineers and scientists working with foams, hydrogels and aerogels for a range of applications and industries.



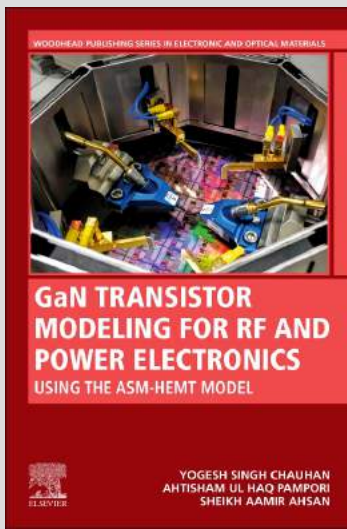
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GaN Transistor Modeling for RF and Power Electronics

Using The ASM-HEMT Model

Yogesh Singh Chauhan, Professor, Department of Electrical Engineering, Indian Institute of Technology Kanpur, India; **Ahtisham Ul Haq Pampori**, Department of Electrical Engineering, Indian Institute of Technology, Kanpur, U.P., India and **Sheikh Aamir Ahsan**, Assistant Professor, Department of Electronics and Communication Engineering, National Institute of Technology Srinagar, Hazratbal, Srinagar, India

ISBN: 9780323998710
PUB DATE: May 01, 2024
LIST PRICE: £165.00 / \$215.00 / €190.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 395
ILLUSTRATIONS: 200 illustrations (150 in full color)
AUDIENCE: Materials Scientists and Engineers; Electrical Engineers; Physicists
BIC CODES: TGX, TGM, TJFD, TJ
THEMA CLASSIFICATION: THEMAKND; THEMATGM; THEMATJF

The first book to explain the industry standard ASM-HEMT compact model and the characterization and parameter extraction needs of GaN modeling

A Volume in the *Woodhead Publishing Series in Electronic and Optical Materials Series*

KEY FEATURES

- Provides an overview of the operation and physics of GaN-based transistors
- Describes all aspects of the ASM-HEMT model for GaN circuits, which is an industry standard model, by the developers of the model
- Details parameter extraction of GaN devices and measurement data requirements for GaN model extraction

DESCRIPTION

GaN Transistor Modeling for RF and Power Electronics: Using The ASM-GaN-HEMT Model covers all aspects of characterization and modeling of GaN transistors for both RF and Power electronics applications. Chapters cover an in-depth analysis of the industry standard compact model ASM-HEMT for GaN transistors. The book details the core surface-potential calculations and a variety of real device effects, including trapping, self-heating, field plate effects, and more to replicate realistic device behavior. The authors also include chapters on step-by-step parameter extraction procedures for the ASM-HEMT model and benchmark test results.

GaN is the fastest emerging technology for RF circuits as well as power electronics. This technology is going to grow at an exponential rate over the next decade. This book is envisioned to serve as an excellent reference for the emerging GaN technology, especially for circuit designers, materials science specialists, device engineers and academic researchers and students.



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ENGINEERING Electrical

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Structural Health Monitoring/Management (SHM) in Aerospace Structures

Edited by : **Fuh-Gwo Yuan**, Professor, Department of Mechanical and Aerospace Engineering, North Carolina State University, USA

ISBN: 9780443154768
PUB DATE: May 01, 2024
LIST PRICE: £200.00 / \$265.00 / €230.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 511

AUDIENCE: R&D managers, materials scientists and engineers and researchers working in industry, academia and government research agencies developing new systems for the SHM of aerospace, mechanical and civil engineering structures, as well as SHM system designers.

BIC CODES: TDCP, TDCQ
THEMA CLASSIFICATION: THEMATDPF; THEMATGM; THEMATGMP

Presents recent developments in the structural health monitoring management of aerospace, mechanical, and civil engineering structures

A Volume in the *Woodhead Publishing Series in Composites Science and Engineering Series*

KEY FEATURES

- Presents new developments in smart materials for sensing and actuation
- Discusses new developments in mechanical metamaterials
- Presents the latest on signal/imaging processing for damage diagnosis
- Explores damage prognosis and integrated vehicle health management (IVHM)
- Covers new developments in machine learning and artificial Intelligence

DESCRIPTION

Structural Health Monitoring/Management (SHM) in Aerospace Structures provides readers with the spectacular progress that has taken place over the last twenty years with respect to the area of Structural Health Monitoring (SHM) Management. The SHM field encompasses transdisciplinary areas, including smart materials, sensors and actuators, damage diagnosis and prognosis, signal and image processing algorithms, wireless intelligent sensing, data fusion, and energy harvesting. This book focuses on how SHM techniques can be applied to aircraft, mechanical and civil engineering structures with particular emphasis on composite materials. This will be a valuable reference resource for R&D managers, materials scientists, and engineers working in the aerospace sector, for researchers and system designers working in industry, and for academia and government research agencies developing new systems for the SHM of aerospace, mechanical, and civil engineering structures.



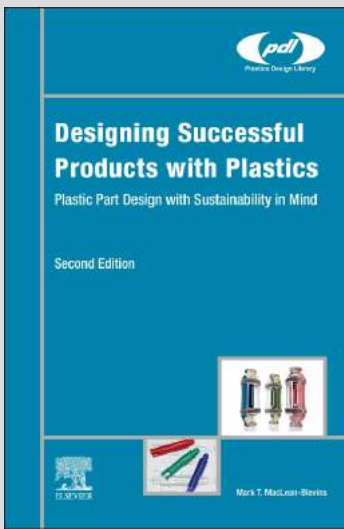
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Designing Successful Products with Plastics, 2e

Plastic Part Design with Sustainability in Mind

Mark T. MacLean-Blevins, MacLean-Blevins and Associates, Inc., Westminster, USA

ISBN: 9780443161148

PREVIOUS ISBN: 9780323445016

PUB DATE: May 01, 2024

LIST PRICE: £170.00 / \$220.00 / €195.00

DISCOUNT: Reference

FORMAT: Hardback

TRIM: 6.00w x 9.00h

PAGES: c. 335

AUDIENCE: Engineers and designers responsible for the design of products and component parts, Manufacturing engineers responsible for production of plastic components, Students and researchers working on designing with plastics

BIC CODES: TBC

THEMA CLASSIFICATION: THEMATBC

Offers expert guidance on design considerations required to bring a concept product or part to ready-for-production

A Volume in the *Plastics Design Library Series*

KEY FEATURES

- Brings together the worlds of the plastic part designer and the industrial designer and shows how each impacts the success of a development project.
- Teaches the “Four Pillars” considerations (Materials, Processes, Tooling, and Design) required for every design decision to be made during a plastic part design project. The interrelationship of these considerations with the sustainability intent for the product being developed is taught and illustrated within this new edition.
- Illustrates the product design process roadmap from creation of the concept through implementation into manufacturing, highlighting steps and methods used throughout the process to limit risk and ensure success.
- Includes methods and design project management techniques used to ensure an efficient design process and successful manufacturing of the product or part.

DESCRIPTION

Designing Successful Products with Plastics: Plastic Part Design with Sustainability in Mind, Second Edition provides expert insights into the design considerations required to bring a concept product or part through design and ready-for-production. Rather than focusing on design rules and engineering equations used during product development, the emphasis of the book is on what the designer needs to consider during the early conceptual visualization stages, and in the detailed stages of the design process. This fully updated edition features new practical advice on how to design sustainably throughout the book.

This approach will bridge the gap between the industrial designer, tasked with the ‘big picture’ product design and use, and the part designer, tasked with the detailed plastic part design for manufacture. Useful to both experienced and novice designers, this book brings valuable design process information through specific examples, enabling designers and engineers in the plastics industry to effectively use the available technical information to successfully design and manufacture new products.



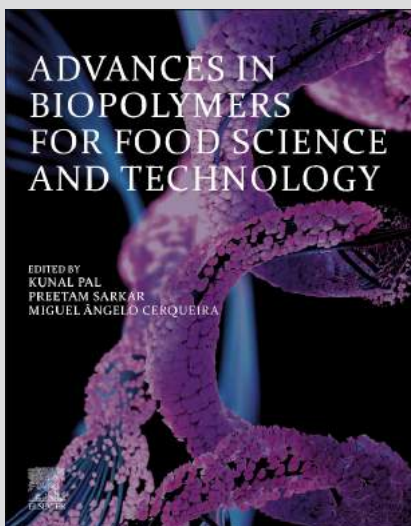
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Advances in Biopolymers for Food Science and Technology

Edited by : **Kunal Pal**, Professor in the Department of Biotechnology and Medical Engineering, National Institute of Technology Rourkela, Odisha, India.; **Preetam Sarkar**, Assistant Professor of Food Sciences at the Department of Food Process Engineering, National Institute of Technology Rourkela, Odisha, India. and **Miguel Cerqueira**, Staff Researcher in the Food Processing and Nutrition group at the International Iberian Nanotechnology Laboratory, Braga, Portugal.

ISBN: 9780443190056
PUB DATE: May 01, 2024
LIST PRICE: £185.00 / \$240.00 / €210.00

DISCOUNT: Reference

FORMAT: Paperback

TRIM: 7.50w x 9.25h

PAGES: c. 558

AUDIENCE: Researchers and advanced students across polymer science, food science, chemistry, packaging, nanotechnology, and materials science, Engineers, scientists, and R&D professionals with an interest in biopolymers for advanced applications in food products and packaging

BIC CODES: TDCT, TDCP, TGM, PNR

THEMA CLASSIFICATION:

THEMATDCT; THEMATDCP;

THEMATGMP; THEMATDPF;

THEMATGM

An innovative guide to bio-based polymers for applications in food design, smart packaging, and nutraceuticals

KEY FEATURES

- Covers biopolymers from a range of sources and their preparation as composites, gels, and coatings
- Explores applications across food structure design, smart packaging systems, encapsulation, and nutraceuticals
- Offers case studies and analyzes experimental data on biopolymeric materials for food applications

DESCRIPTION

Advances in Biopolymers for Food Science and Technology brings together the latest techniques for the preparation of bio-based polymeric materials for novel food applications. Sections introduce biopolymers and their various polysaccharide and protein sources, addressing biopolymers from marine sources in particular. Food design using biopolymers, and their preparation as gels and composites are then discussed in detail. This is followed by in-depth chapters that guide the reader through specific applications, including fat replacement products, delivery systems, food emulsions, micro- and nano-encapsulation, nanovehicles, nanostructures, nanofilms, antimicrobial peptides, food coatings, food packaging, smart monitoring, cryoprotection, and cultured meat production. Finally, the various challenges regarding sustainability of food packaging are addressed. This is a valuable resource for researchers and advanced students across polymer science, food science, chemistry, packaging, nanotechnology, and materials science, as well as industrial scientists and R&D professionals with an interest in biopolymers for advanced applications in food products and packaging.



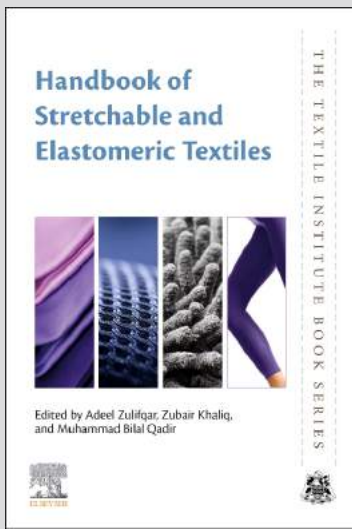
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Handbook of Stretchable and Elastomeric Textiles

Edited by : **Adeel Zulifqar**, Assistant Professor, Department of Fabric Manufacturing, National Textile University, Faisalabad, Punjab, Pakistan; **Zubair Khaliq**, Assistant Professor, Department of Polymer Engineering, National Textile University, Faisalabad, Punjab, Pakistan and **Muhammad Bilal Qadir**, Assistant Professor, Department of Yarn Manufacturing, National Textile University, Faisalabad, Punjab, Pakistan

ISBN: 9780323911948
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LIST PRICE: £165.00 / \$215.00 / €190.00
DISCOUNT: Reference
FORMAT: Paperback
TRIM: 6.00w x 9.00h
PAGES: c. 279
AUDIENCE: Students, researchers, engineers, and materials scientists working with sportswear, casual wear, and stretchable textiles for health care applications
BIC CODES: TGM
THEMA CLASSIFICATION: THEMATGM

A guide to everything you need to know about elastomeric textiles, including manufacturing techniques, physical properties, processing methods, and in-use care

A Volume in the *The Textile Institute Book Series* Series

KEY FEATURES

- Provides foundational knowledge on the polymeric structure of elastomeric fibers
- Explains how various materials can be used to prepare elastomeric fibers
- Addresses how elastomerics are being used in wearables and smart textile technologies

DESCRIPTION

Handbook of Stretchable and Elastomeric Textiles is a comprehensive guide to everything you need to know about elastomeric textiles, including manufacturing techniques, physical properties, processing methods, and in-use care. All types of stretchable textiles are covered, including polymers, fibers, yarns, fabrics and composites. Starting with the fundamentals of the synthesis, properties and processing of elastomeric materials, this book goes on to help the reader choose the most appropriate parameters for manufacturing and processing, as well as the best elastomeric material according to specific end use applications. In general, elastomeric textiles are difficult to handle. During the manufacturing of elastomeric fabric, the handling of yarns is complicated. In addition, the processing stage is also challenging due to the heat sensitivity of the materials that affects how they are dyed, printed, washed and dried. The specific techniques required to produce a successful elastomeric textile have been developed over many years, hence this expertise is hard to come by.



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