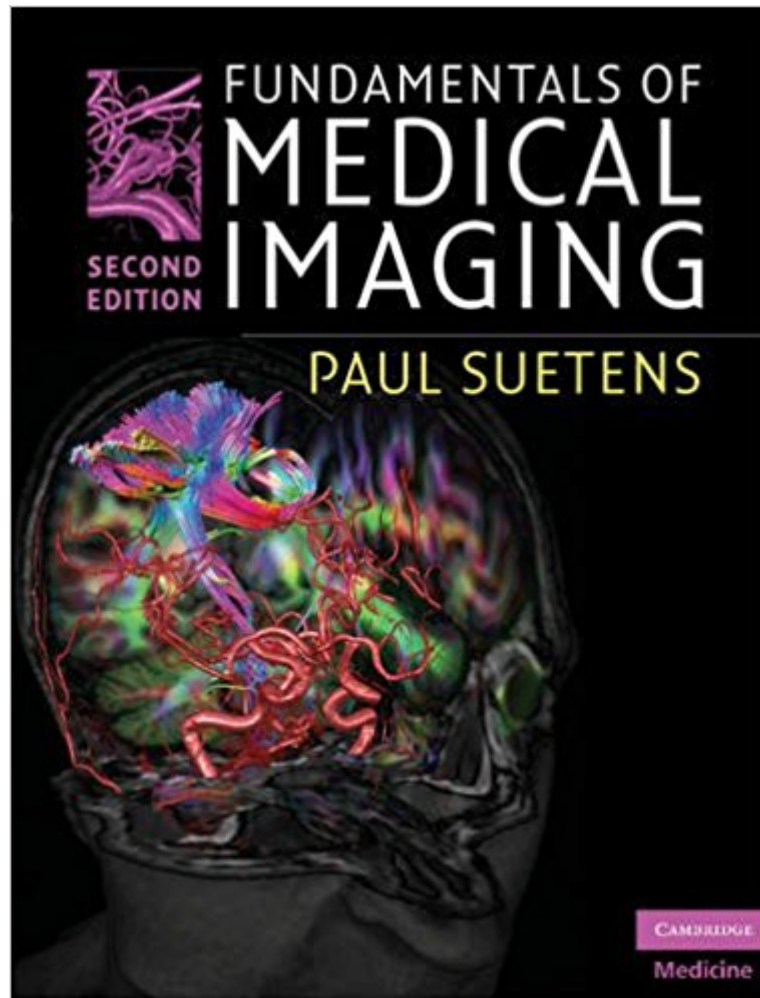




Ebook Directory
the best source of ebook

The book was found

Fundamentals Of Medical Imaging



Synopsis

Fundamentals of Medical Imaging, second edition, is an invaluable technical introduction to each imaging modality, explaining the mathematical and physical principles and giving a clear understanding of how images are obtained and interpreted. Individual chapters cover each imaging modality - radiography, CT, MRI, nuclear medicine and ultrasound - reviewing the physics of the signal and its interaction with tissue, the image formation or reconstruction process, a discussion of image quality and equipment, clinical applications and biological effects and safety issues. Subsequent chapters review image analysis and visualization for diagnosis, treatment and surgery. New to this edition: • Appendix of questions and answers • New chapter on 3D image visualization • Advanced mathematical formulae in separate text boxes • Ancillary website containing 3D animations: www.cambridge.org/suetens • Full colour illustrations throughout

Engineers, clinicians, mathematicians and physicists will find this an invaluable aid in understanding the physical principles of imaging and their clinical applications.

Book Information

Hardcover: 261 pages

Publisher: Cambridge University Press; 2 edition (August 31, 2009)

Language: English

ISBN-10: 0521519152

ISBN-13: 978-0521519151

Product Dimensions: 7.4 x 0.8 x 9.7 inches

Shipping Weight: 1.9 pounds (View shipping rates and policies)

Average Customer Review: 3.1 out of 5 stars 2 customer reviews

Best Sellers Rank: #414,974 in Books (See Top 100 in Books) #5 in Books > Science & Math > Physics > Engineering #85 in Books > Textbooks > Medicine & Health Sciences > Medicine > Clinical > Radiology & Nuclear Medicine > Diagnostic Imaging #112 in Books > Medical Books > Medicine > Internal Medicine > Radiology > Diagnostic Imaging

Customer Reviews

"Well-illustrated line drawings, clinical images, and photographs, more than 300 of which are in color....This book is written well and is easy to read. Depending on the reader's background, one can easily skip sections on mathematical theories on image formation (especially first-year medical physics students) but still get an understanding of various imaging modalities. Students interested in pursuing medical imaging will find this book helpful and should consider adding it to their private

collection. One of the features I like about this second edition is the set of questions on each chapter at the end of the book intended to test readers' knowledge. Anyone teaching undergraduate or graduate courses in medical imaging will greatly benefit from the material in this book." Doody's Review Service" This book will benefit anyone who wishes to learn about one or more of the established medical imaging techniques. It provides enough information to gain a working knowledge of the mathematics and physics of each technique. It also serves as a good starting point for someone wishing to specialise in a technique." Contemporary Physics

An invaluable technical introduction to each imaging modality, explaining mathematical and physical principles and how medical images are obtained and interpreted. Individual chapters on each modality review the physics of the signal, image formation/reconstruction, image quality and equipment, clinical applications, biological effects and safety issues.

It is a good text if you want all the detailed mathematical proofs and concepts. It's a little dense if you just want an introduction or overview.

I bought this because it was 'required' for my graduate level medical imaging course. It is however, not up to par for what a biomed. eng. or medical physicist would want/need. It is more appropriate for a medical student interested in imaging or a radiology resident. For the course, we quickly ended up referring to Jerry Prince's Medical Imaging Signals and Systems, which goes much more in depth into the math, yet explains it really well.

[Download to continue reading...](#)

Portal Hypertension: Diagnostic Imaging and Imaging-Guided Therapy (Medical Radiology / Diagnostic Imaging) Medical Terminology: Medical Terminology Easy Guide for Beginners (Medical Terminology, Anatomy and Physiology, Nursing School, Medical Books, Medical School, Physiology, Physiology) Medical Terminology: Medical Terminology Made Easy: Breakdown the Language of Medicine and Quickly Build Your Medical Vocabulary (Medical Terminology, Nursing School, Medical Books) Patient Care in Imaging Technology (Basic Medical Techniques and Patient Care in Imaging Technol) Fundamentals of Pediatric Imaging, 2e (Fundamentals of Radiology) The Patient's Medical Journal: Record Your Personal Medical History, Your Family Medical History, Your Medical Visits & Treatment Plans American Medical Association Complete Medical Encyclopedia (American Medical Association (Ama) Complete Medical Encyclopedia) Fundamentals of Medical Imaging Medical Imaging (Exploring Science and Medical Discoveries) Principles of Radiographic

Imaging: An Art and A Science (Carlton, Principles of Radiographic Imaging) The Filmmaker's
Guide to Digital Imaging: for Cinematographers, Digital Imaging Technicians, and Camera
Assistants Ethical and Legal Issues for Imaging Professionals, 2e (Towsley-Cook, Ethical and Legal
Issues for Imaging Professionals) Principles of Dental Imaging (PRINCIPLES OF DENTAL
IMAGING (LANGLAND)) Evidence-Based Imaging: Improving the Quality of Imaging in Patient
Care Essentials of Nuclear Medicine Imaging: Expert Consult - Online and Print, 6e (Essentials of
Nuclear Medicine Imaging (Mettler)) Hybrid PET/MR Imaging, An Issue of Magnetic Resonance
Imaging Clinics of North America, 1e (The Clinics: Radiology) Breast Imaging (Kopans, Breast
Imaging) Diagnostic Imaging: Head and Neck: Published by Amirsys (Diagnostic Imaging
(Lippincott)) Plastic Injection Molding: Product Design & Material Selection Fundamentals (Vol II:
Fundamentals of Injection Molding) (Fundamentals of injection molding series) Plastic Injection
Molding: Mold Design and Construction Fundamentals (Fundamentals of Injection Molding) (2673)
(Fundamentals of injection molding series)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)