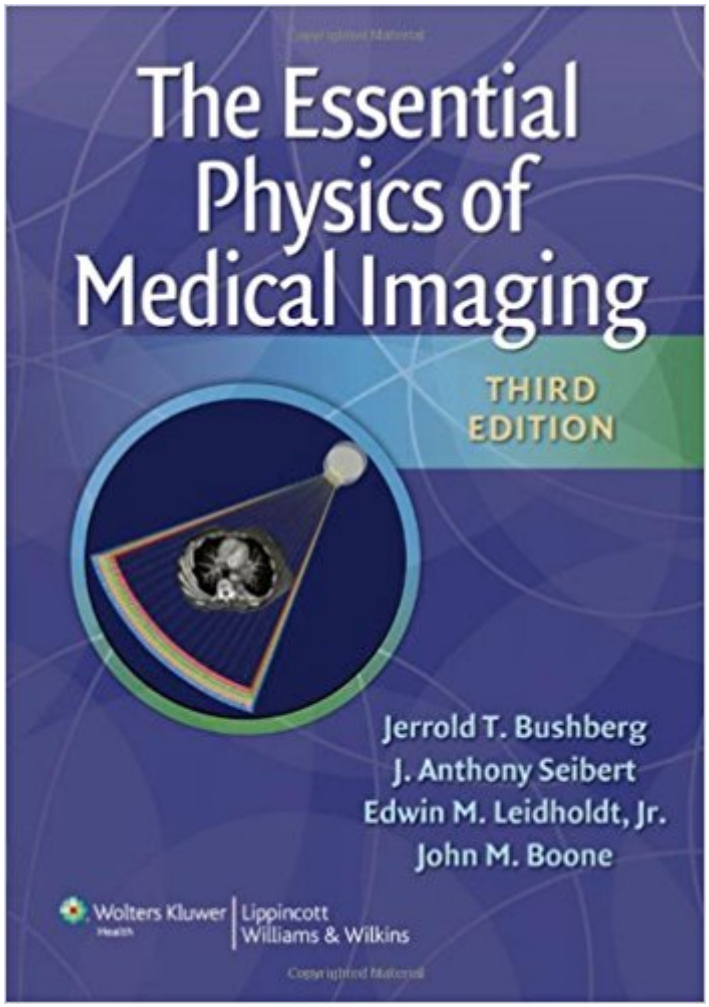
The Essential Physics Of Medical Imaging, Third Edition



Synopsis

Publisherâ ™s Note:Â Â Products purchased from 3rd Party sellers are not guaranteed by the Publisher for quality, authenticity, or access to any online entitlements included with the product.ThisÂ renownedÂ work is derived from the authors' acclaimed national review course (â œPhysics of Medical Imaging")Â at the University of California-Davis for radiology residents.Â The text is a guide to the fundamental principles of medical imaging physics, radiation protection and radiation biology, withÂ complex topics presented in the clear and concise manner and style for which these authors are known.Â Coverage includes the production, characteristics and interactions of ionizing radiation used in medical imaging and the imaging modalities in which they are used, including radiography, mammography, fluoroscopy, computed tomography and nuclear medicine. Â Special attention is paid to optimizing patient dose in each of these modalities.Â Sections of the book address topics common to all forms of diagnostic imaging, including image quality and medical informaticsÂ as well as the non-ionizing medical imaging modalities of MRI and ultrasound. The basic science important to nuclear imaging, including the nature and production of radioactivity, internal dosimetry andÂ radiation detection and measurement, are presented clearly and concisely. Current concepts in the fields of radiation biology and radiation protection relevant to medical imaging, and a number of helpful appendices complete this comprehensive textbook.Â The text is enhanced by numerous full color charts, tables, images and superb illustrations that reinforce central concepts. The book is ideal for medical imaging professionals, andÂ Â teachers and students in medical physics and biomedical engineering. Radiology residents will find this text especially useful in bolstering their understanding of imaging physics and related topics prior to board exams.--NEWÂ Four-color throughout--NEWÂ Companion website with fully searchable text and images--Basic line drawings help to explain concepts--Comprehensive coverage of diagnostic imaging modalities--Superb writing style of the author team helps make a difficult subject approachable and engaging

Book Information

Hardcover: 1048 pages
Publisher: LWW; 3 edition (December 28, 2011)
Language: English
ISBN-10: 0781780578
ISBN-13: 978-0781780575
Product Dimensions: 1.8 x 7.2 x 10.2 inches

Shipping Weight: 5 pounds (View shipping rates and policies)

Average Customer Review: 4.6 out of 5 stars 38 customer reviews

Best Sellers Rank: #92,354 in Books (See Top 100 in Books) #39 inÂ Books > Textbooks > Medicine & Health Sciences > Medicine > Clinical > Radiology & Nuclear Medicine #44 inÂ Books > Medical Books > Medicine > Internal Medicine > Radiology #104 inÂ Books > Textbooks > Medicine & Health Sciences > Medicine > Clinical > Diagnosis

Customer Reviews

This book is a must-read for anyone studying for the new ABR Core exam. Anyone who has met them will attest the authors are extremely dedicated educators who personally go to great lengths to help residents master the fundamentals of imaging physics. They listened to our feedback and this new edition constitutes a substantial upgrade over the previous one, as other reviewers have commented. The addition of many graphs & images makes the complex subjects much more approachable & easily understood. More importantly, the authors have taken great pains to make the discussions clinically relevant to the general radiologist.The authors are leaders in their respective fields, and this book is the de facto standard for medical imaging physics in the academic radiology community. Ideally, the book should be read throughout first & second years of residency for comprehension with the opportunity for reinforcement with knowledgeable medical physicists and/or staff radiologists. However, even if (or especially if) you’re lacking the latter, the book provides a comprehensive treatment of every relevant physics subject needed to succeed on the Core exam. This book serves well as a primary reference throughout the general radiology residency and should be the starting point for Core exam physics preparation. I found re-reading the book indispensible for board preparation and it served best when used as a reference to explore questions from other sources (i.e., Huda, RAPHEX exams, UCD physics course by the authors, RSNA modules etc.). A few of the more complex and evolving imaging techniques in MRI (e.g., phase-contrast, SWI, functional MRI) may require supplemental reading, but even these areas are treated adequately for a basic understanding. Finally, with the revisions made in this updated edition, skimming the graphs/figures also made for a useful last minute physics review before the test.

more of a reference text no way i was able to read all of this to prep for my radiology post grad exams

Fast delivery and the book is in very good shape.The book context is really easy to read and a very good reference book for medical physics related personnel.The colourized photos of the third edition make it even more attractive and interesting to read.

Excellent condition.

Nice book with tons of colorful pictures on this new edition, the pictures really help understand the physics. Good job explaining things for most of it, at times though it makes it a bit more confusing then it need to be but overall very helpful and new edition is a pleasure to look at and read.

As a future radiology resident, I bought this edition (older now) to skim through and see how I liked it. Three chapters in, I think this book has a great balance between the physics of medical imaging, while stating its message to a future clinician. It has enough depth to explain chemical and physical properties of imaging for any of those interested. It might be too in depth for radiology training (e.g. I highly doubt a majority of my future work will involve the content of this book), however for a future clinician wanting an in-depth description of how medical imaging is done, this book is perfect.

Bushberg is definitely not for the faint of heart. It is a challenging book but filled with a bunch of useful information. The product was delivered on time in good condition and met all of my expectations. It was also cheaper than my university book store.

Book to read & get brighterÃ Â ÂˆÂ

Portal Hypertension: Diagnostic Imaging and Imaging-Guided Therapy (Medical Radiology / Diagnostic Imaging) The Essential Physics of Medical Imaging, Third Edition Third Eye: Third Eye Activation Mastery, Easy And Simple Guide To Activating Your Third Eye Within 24 Hours (Third Eye Awakening, Pineal Gland Activation, Opening the Third Eye) The Essential Physics of Medical Imaging (2nd Edition) 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) Essential Oils: 50 Essential Oil Dog & Cat Recipes From My Essential Oil

Private Collection: Proven Essential Oil Recipes That Work! (Essential Oil Pet Private Collection Book 1) Essential Oils: Essential Oil Recipe Book - 30 Proven Essential Oil Recipes ::: My Essential Oil Private Collection Vol. 1 (Private Collection Essential Oils) Introduction to Medical Imaging: Physics, Engineering and Clinical Applications (Cambridge Texts in Biomedical Engineering) 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) Medical Imaging (Exploring Science and Medical Discoveries) Principles of Radiographic Imaging: An Art and A Science (Carlton,Principles of Radiographic Imaging) The FilmmakerÃ¢â ¬â„¢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)