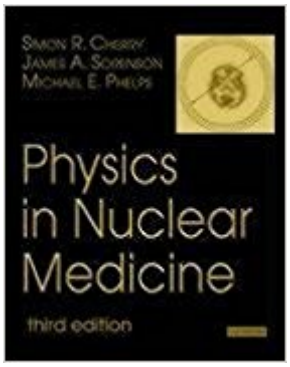
Physics In Nuclear Medicine, 3e



Synopsis

Experts in their fields provide up-to-date, comprehensive information on the physics underlying modern nuclear medicine and imaging using radioactively labeled tracers. They examine every aspect of the field--from basic atomic physics through radioactivity, isotope production, interaction of radiation with matter, radiation detection, and imaging systems. Examples are presented with solutions worked out in step-by-step detail, illustrating important concepts and calculations.Features a brand-new author, Dr. Simon Cherry, who contributes his cutting-edge knowledge in nuclear medicine instrumentation. Presents a new introductory chapter, "What is Nuclear Medicine." Revises and updates all chapters and appendices. Discusses the hottest topics in the field, including isotope production and tracer synthesis Â image quality in nuclear medicine Â tomographic reconstruction in nuclear medicine Â SPECT Â PET Â computers in nuclear medicine Â and more. Explains the analytic equations that describe the physics involved and illustrates them with graphs to make the material accessible to the non-math expert. Provides more advanced mathematics and concepts in appendices. Includes many new illustrations and examples throughout. Reorganizes several chapters, providing a more logical flow of information.

Book Information

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Customer Reviews

"This new edition of 'Physics in Nuclear Medicine' is organized well and written clearly. It accomplishes the authors' goal of providing a single volume that serves as both a textbook for

radiology residents, scientists, and technologists, and a reference for physicians and scientists in related fields. Overall, the authors have done an excellent job of elucidating the expanding and complex role of physics principles in nuclear medicine." Radiology, March 2005, p. 878

Simon R. Cherry, Ph.D., Professor, Department of Biomedical Engineering, University of California - Davis, Davis, California; James A. Sorenson, PhD, Emeritus Professor of Medical Physics, University of Wisconsin - Madison, Madison, Wisconsin; and Michael E. Phelps, PhD, Norton Simon Professor, Chair, Department of Molecular and Medical Pharmacology, Chief, Division of Nuclear Medicine, UCLA School of Medicine, Los Angeles, California

"Sorenson and Phelps" is now "Cherry, Sorenson and Phelps." It is still the standard text for nuclear medicine physics, covering the topics well for the radiology resident, nuclear medicine resident or fellow, or a beginning medical physicist. While clearly (in my opinion) the best text in its field, I would suggest that the authors give future consideration for a companion CD ROM (as in many new texts) that helps the reader understand some of the more complex topics, and that they give more treatment to quantiative PET scanning (including a "cookbook" on Patlak analysis using either arterial sampling or modified for venous sampling with left ventricular or aortic region of interest measurement with PET/CT). Sadly, little PET/CT information is available, perhaps the "hottest" topic in nuclear medicine.All in all, though, it is still the standard text in the field. I am glad to see (and own) the latest edition, and highly recommend it for purchase.

The book is written as an overview of all aspects of nuclear medicine, and is successfully comprehensive in scope. It is more of a ’theory’ book in that it does not offer, by proportion, much clinically relevant information. The theory happens to be limited in its derivations and is presented semi-qualitatively (equations are offered, but usually too general for those with research interests), though I’m sure it would have to be much thicker to incorporate said information.Ultimately, it is a very accessible introduction to the science and would be useful in preparation for Nuc Med or Radiology (and similar) board exams, if augmented with more quantitatively detailed texts.

Great condition

item as described. fast shipping

I really like the way that this book is written. The material is clearly written and easy to follow. Also, the chapter lay-out works well nicely!

A great deal of the information that you will need to get your feet wet in the field of Nuclear Medicine physics is contained in this book. I have used it to teach medical residents and it follows the board exam material pretty faithfully. Well written.

This a great introductory book to Nuclear Medicine Physics which is easy to understand and read with larger print and lots of figures.

I like this text book..It is a great introductory book, very clear explanations, good references...It helped me a lot for my dissertation