Biomedical Instrumentation: Technology and Applications

R. S. Khandpur
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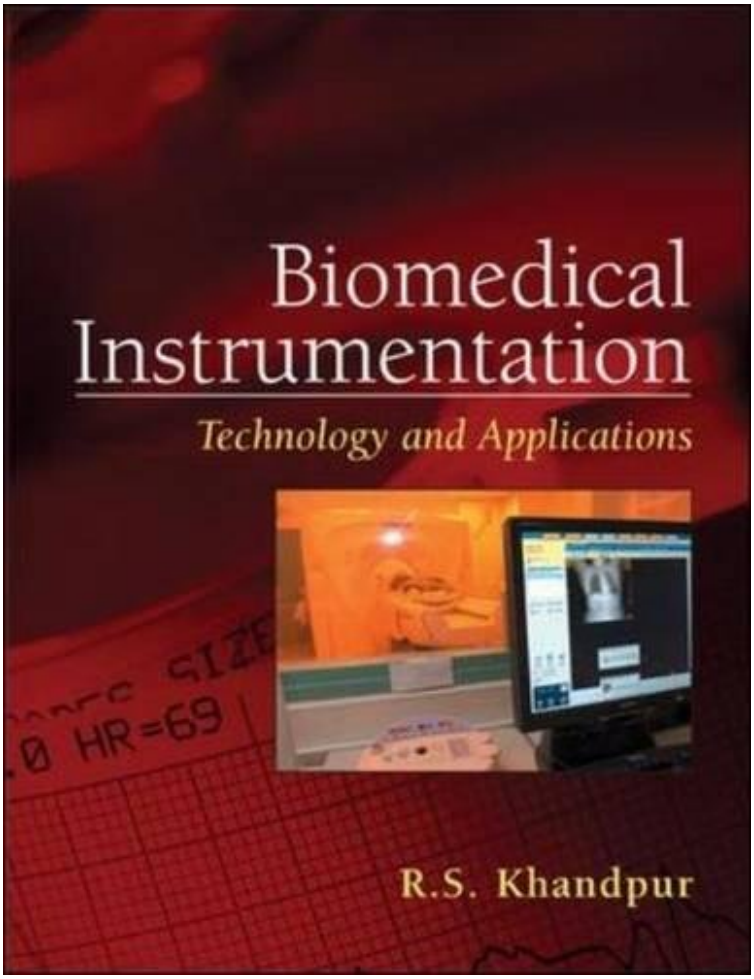

#1215778 in Books R S Khandpur 2004-11-26Ingredients: Example IngredientsOriginal language:EnglishPDF # 1 9.50 x 2.13 x 7.60l, 3.85 #File Name: 0071447849924 pagesBiomedical Instrumentation Technology And Applications | File size: 55.Mb

R. S. Khandpur : Biomedical Instrumentation: Technology and Applications before purchasing it in order to gage whether or not it would be worth my time, and all praised Biomedical Instrumentation: Technology and Applications:

0 of 0 people found the following review helpful. Better Than expectedBy bobThe description said it was lightly used but it looked like it was brand new. It was also an awesome deal!5 of 8 people found the following review helpful. Biomedical Instrumentation -Technology and Applications R S KhandpurBy MunishFor a long time, I have been looking for a book which could lucidly explain the relationship between engineering and medicine. Most of the books on Biomedical Engineering or Biomedical Instrumentation usually miss this information which a student or research scholar would like to have understand. This gap is elegantly filled by Biomedical Instrumentation, Technology and Application by Dr. Khandpur.The book covers a wide range of equipment spanning direct patient care equipment,

imaging technology, therapeutic techniques and instrumentation used in clinical laboratories. The book is profusely illustrated with a very large base of referenced material which would enable the readers in a specific field to go for detailed consultation. It is a commendable effort. I recommend the book to every student of Biomedical Instrumentation/Engineering.4 of 6 people found the following review helpful. Poorly written; mistakes in formulas and physiology throughout the bookBy J. AguayoThis book needed quite a bit of editing. There are mistakes in the physiology overview sections of the book. There are formulas that are flat out incorrect. The english is poor. There are statements near the end of sections in the book that are not expounded upon. There are figures with captions that do not explain them. This isnt just a problem here or there but a recurring problem throughout the entire book. This book was needed for a course in biomedical instrumentation but with all the errors throughout the book, I would not recommend this to any Professor thinking of using it.

One of the most comprehensive books in the field, this import from TATA McGraw-Hill rigorously covers the latest developments in medical imaging systems, gamma camera, PET camera, SPECT camera and lithotripsy technology. Written for working engineers, technicians, and graduate students, the book includes of hundreds of images as well as detailed working instructions for the newest and more popular instruments used by biomedical engineers today.

From the Back CoverCOMPREHENSIVE, DETAILED COVERAGE OF THE DESIGN, MAINTENANCE, AND OPERATION OF THE LATEST BIOMEDICAL DEVICES Biomedical Instrumentation rigorously and clearly explains the latest developments and basic engineering principles of the entire spectrum of biomedical devices -- ranging from their physiological basis to diagnostic and therapeutic devices in medical imaging systems. Written by an author with nearly four decades of experience in RD, technology development, and education and training, this heavily illustrated resource details the fundamental principles of operation and the performance parameters of a wide variety of instruments, including: Recording and monitoring instruments Measurement and analysis techniques Therapeutic equipment Digital radiographic equipment Nuclear medical imaging Lithotriptors Anesthesia machines Ventilators Radiotherapy equipment Automated drug delivery systems A COMPLETE SINGLE SOURCE REFERENCE FOR TODAY'S LATEST BIOMEDICAL DEVICES * Measuring * Recording and Monitoring Instruments * Fundamentals of Medical Instrumentation * Bioelectric Signals and Electrodes * Physiological Transducers * Recording Systems * Biomedical Recorders * Patient Monitoring Systems * Arrhythmia and Ambulatory Monitoring Instruments * Biomedical Telemetry and Telemedicine * Oximetry; Blood Flowmeters * Cardiac Output Measurement * Pulmonary Function Analyzers * Clinical Laboratory Instruments * Blood Gas Analyzers * Blood Cell Counters * Audiometers and Hearing Aids * Patient Safety * Modern Imaging Systems * X-Ray Machines and Digital Radiography * X-Ray Computed Tomography * Nuclear Medical Imaging Systems * Ultrasonic Imaging Systems * Thermal Imaging Systems * Therapeutic Equipment * Cardiac Pacemakers * Cardiac Defibrillators * Instruments for Surgery * Laser Applications in the Biomedical Field * Physiotherapy and Electrotherapy Equipment * Haemodialysis Machines * Lithotriptors; Anesthesia Machines * Ventilators * Radiotherapy Equipment * Automated Drug Delivery Systems.About the AuthorR. S. KHANDPUR is currently Director General, Pushpa Gujral Science City, Kapurthala, Punjab. Prior to this, he was Director General, Centre for Electronics Design and Technology of India (CEDTI), an autonomous Scientific Society of the Ministry of Communication and Information Technology, Government of India. He was the Founder/Director of CEDTI, Mohali, which is the first ISO-9002 certified organization of the Ministry of Information Technology. Mr. Khandpur is the recipient of the 1989 Independence Day Award by the National Research and Development Corporation and IETE (Institute of Electronics and Telecommunication Engineers) for outstanding contributions toward the development of the electronics industry. He is Member, Board of Governors, Punjab Technical University; Director, Board of Directors, Electronics Corporation of Punjab; AICTE Distinguished Visiting Professor and Member, Vision Group on IT, established by the Punjab Government. He has served as a scientist for 24 years in CSIO, Chandigarh, a constituent laboratory of the Council of Scientific and Industrial Research (CSIR), as Head of the Medical Instruments Division (1975-1989) and Head of Electronics Division (1986-1989). He was the Project Coordinator for Indias first Medical Linear Accelerator Machine for cancer treatment, installed at PGI, Chandigarh, in 1989. Mr. Khandpur is a Member of the IEEE (Institute of Electronics and Electrical Engineers), USA; a fellow of IETE (Institute of Electronics and Telecommunication Engineers), and Member, Society for Engineering in Medicine and Biology, USA. He has over 37 years of experience in RD, technology development, technology transfer, education and training, consultancy, and management at national and international levels. Mr. Khandpur holds 6 patents of innovative designs, has authored 7 books, and has published over 60 research and review papers.