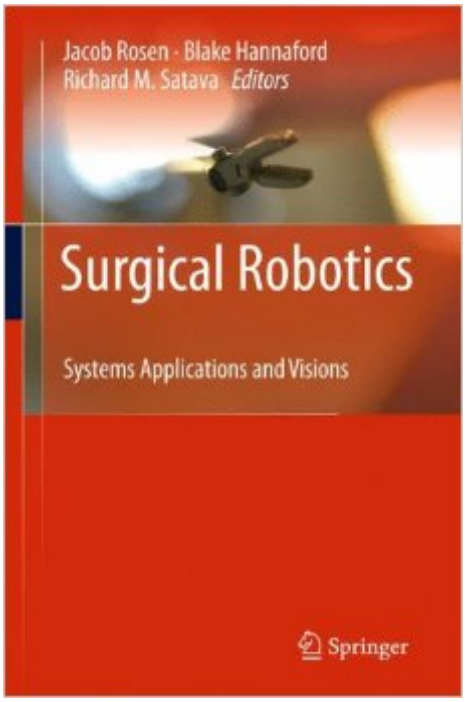
Surgical Robotics: Systems Applications And Visions



Synopsis

Surgical robotics is a rapidly evolving field. With roots in academic research, surgical robotic systems are now clinically used across a wide spectrum of surgical procedures. Surgical Robotics: Systems Applications and Visions provides a comprehensive view of the field both from the research and clinical perspectives. This volume takes a look at surgical robotics from four different perspectives, addressing vision, systems, engineering development and clinical applications of these technologies. The book also: -Discusses specific surgical applications of robotics that have already been deployed in operating rooms -Covers specific engineering breakthroughs that have occurred in surgical robotics -Details surgical robotic applications in specific disciplines of surgery including orthopedics, urology, cardiac surgery, neurosurgery, ophthalmology, pediatric surgery and general surgery Surgical Robotics: Systems Applications and Visions is an ideal volume for researchers and engineers working in biomedical engineering.

Book Information

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Customer Reviews

This book is great collection and well arranged. Most chapters were collected from SCI/EI papers. Even you had read some books before, I still recommended it. And though there is some mathematics, difficult to me, I think the study results within this book is very useful for clinical surgeon.The advantage and disadvantage of some chapter:Chapter 2-4: clear explain the developing history; except Chapter 4.6.2.7-8 lacks of detail financial report.Chapter 5: It may be not interest by surgeon, because it may be solved by image analysis.Chapter 6: It did not explain the

NOTES, and that may disturbs the biomedical engineer. I think the problems to NOTES is that it lacks the well-designed curved instrument, not the robotcs.Chapter 9: It explain very clear about the history of da Vinci System, but lack of detail of kinetic/kinematic/haptic-feedback detailsChapter 14: It did not mention the major problem of the electric power. The problem to capsule is the short time of electric power supply, not the imaging transfer or others. And according to the battery technique now, it seems impossible to be solved.Chapter 18.4-5: useless, because surgeon have no time to check another video about tie tightness during busy surgery.Chapter 20: useless, because the metastatic lymph node identification is more important than tumor, in surgical procedure.Chapter 24 about tissue damage, 25 about surgical skills: recommended. Even you are a laparoscopic surgeon, and not interesting in robotic surgery; I still recommended.Of course I am not a cardiac surgery, neurosurgery, orthopedics, and skipped about those chapter. I still suggested that every surgical department in any hospital should got this book.

Springer, New York, NY, BERLIN HeidelbergJoseph J Grenier MD PhDThis is simply a marvelous comprehensive book about all areas pertaining to surgical robotics inc. telesurgery, remote control surgeries on the thorax, abdomen, head & neck, and orthopaedic surgery. The daVinci system is detailed, as are the physics, engineering, and clinical implementation inc. literature dating to 1970.â ¢ Title Surgical Robotic Surgery

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