



Energy Harvesting and Power Delivery for Implantable Medical Devices

By Chi-Ying Tsui, Xing Li, Wing-Hung Ki

now publishers Inc. Paperback. Book Condition: new. BRAND NEW, Energy Harvesting and Power Delivery for Implantable Medical Devices, Chi-Ying Tsui, Xing Li, Wing-Hung Ki, Implantable Medical Devices (IMD) have been used since the implantable pacemaker in 1958. Since then, numerous types of IMDs have been introduced to tackle a variety of health issues. Providing a constant and perpetual energy source is a key design challenge for IMDs. Harvesting energy from the human body and its surroundings is one of the possible solutions. Delivering energy from outside the body through different wireless media is another feasible solution. Energy Harvesting and Power Delivery for Implantable Medical Devices reviews different state-of-the-art mechanisms that do in-body energy harvesting as well as out-of-body wireless power delivery. The details of the energy source, transmission media, energy harvesting and coupling techniques, and the required energy transducers are discussed. The merits and disadvantages of each of these approaches are presented. Different mechanisms have very different characteristics in terms of their output voltage, amount of harvested power, and power transfer efficiency. Therefore different types of power conditioning circuits are required. This monograph compares and contrasts the issues and solutions to designing the building blocks for the power conditioning circuits...



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Reviews

Very beneficial to all of class of people. I am quite late in start reading this one, but better then never. You may like just how the writer create this publication.

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Thorough information! Its this type of great go through. It is amongst the most incredible publication i actually have read through. It is extremely difficult to leave it before concluding, once you begin to read the book.

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