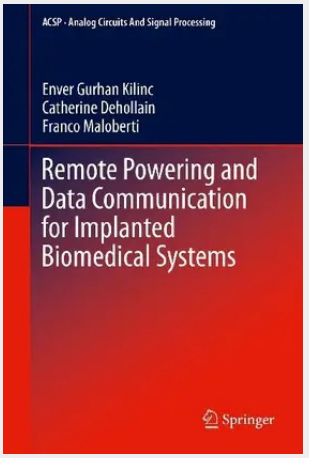
Kilinc / Dehollain / Maloberti

Remote Powering and Data Communication for Implanted Biomedical Systems



This book describes new circuits and systems for implantable biomedical applications and explains the design of a batteryless, remotely-powered implantable micro-system, designed for long-term patient monitoring. Following new trends in implantable biomedical applications, the authors demonstrate a system which is capable of efficient, remote powering and reliable data communication. Novel architecture and design methodologies are used to transfer power with a low-power, optimized inductive link and data is transmitted by a reliable communication link. Additionally, an electro-mechanical solution is presented for tracking and monitoring the implantable system, while the patient is mobile.

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