

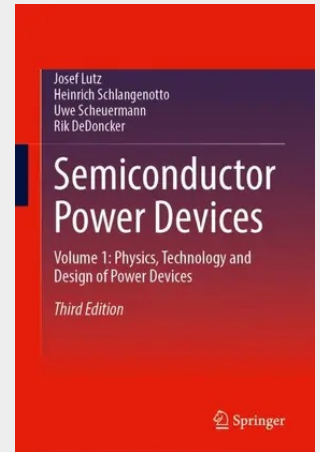
Semiconductor Power Devices

Volume 1: Physics, Technology and Design of Power Devices

This new edition of the book Semiconductor Power Devices is now divided into two volumes. This first volume focuses on the Physics, Technology, and Design of Power Devices. It provides a comprehensive explanation of the physical principles essential for understanding modern power devices. The complementation of the classical pn-theory regarding high-injection behavior and the description of emitters by H. Schlangenotto is now rounded off, displayed in newly written Sections. For IGBTs, new structures with strong carrier confinement are added. New are special chapters on SiC devices and GaN devices. In the SiC chapter, the bipolar mode of the MOSFET body diode and its reverse recovery is discussed for the first time.

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