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The growth of power electronics, centering on inverters and converters as its key system topology, has recently accelerated due to the demand for efficient power conversion. This growth has also been backed by several evolutionary changes and breakthroughs achieved in the areas of power semiconductor device physics, process technology, and design. However, power semiconductor technology remains a highly specialized subject, and the literature on further research, development, and design in related fields is inadequate. With this in view, two specialists in power semiconductors, well known for their research and contributions to the field, compiled this book as a review volume focusing on power chip and module technologies. The prime purpose is to help researchers, academia, and engineers, engaged in areas related to power devices and power electronics, better understand the evolutionary growth of major power device components and their operating principles, design aspects, application features, and trends.

The book covers unique topics related to power semiconductors, including tips on state-of-the-art and futuristic-oriented applications. Numerous figures are included to adequately support the content and to make the book extremely attractive as a practical and user-friendly reference for researchers, technologists, and engineers, as well as a textbook for advanced graduate-level and postgraduate students.



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