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Sommario/riassunto	This book presents a comprehensive treatise on the extraction of semiconductor diode parameters using various methods. Its focus is on metal-semiconductor, metal-insulator-semiconductor, and p-n junction diodes, covering a wide range of metals and semiconductors, including elemental, compound, organic, and nanostructured materials. By bringing together these methods in one place, this book provides a much-needed standardized point of reference for the field. The methods used for device characterization have spread widely but not

yet critically compared and contrasted. This book aims to bridge this gap by offering a comparative review of the methods and providing the most accurate information on current developments. The result is a valuable resource for researchers and practitioners who seek to optimize their use of semiconductor diodes in their work. With its thorough coverage and critical analysis, this book fills a large void in the field of semiconductor device characterization. It is an essential reference for anyone interested in the extraction of semiconductor diode parameters using a variety of methods. "Extraction of Semiconductor Diode Parameters: A Comparative Review of Methods and Materials" is an invaluable resource for anyone in the field. The book brilliantly fulfills its mission to encapsulate the latest developments in semiconductor diodes, providing comprehensive coverage of various materials and crucial parameters. Its comparative analysis of extraction methods, attention to series resistance, and exploration of emerging 2D materials make it a standout in the literature. Moreover, the book's dedication to addressing the impact of artificial intelligence is commendable. As a testament to the author's commitment to empowering researchers and engineers, this book is a must-have companion for those seeking to unlock the full potential of semiconductor devices, making it an indispensable reference in this rapidly evolving field. Prof. Yakuphanoglu, Department of Physics, Faculty of Science, Firat University, Elazig, Turkey Prof. Kwadwo Mensah - Darkwa, Department of Materials Engineering, Faculty of Mechanical and Chemical Engineering, College of Engineering, Kwame Nkrumah University of Science and Technology, Kumasi - Ghana.