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Nota di contenuto	1. Silicon Carbide Overview / Olle Kordina and Stephen E. Saddow -- 2. High-Temperature SiC-FET Chemical Gas Sensors / Anita Lloyd Spetz, Shinji Nakagomi, and Susan Savage -- 3. Silicon Carbide Technology and Power Electronics Applications / C. Wesley Tipton IV and Stephen B. Bayne -- 4. Advances in Selective Doping of SiC Via Ion Implantation / A. Hallen [and others] -- 5. Power SiC MOSFETS / I. Sankin and J.B. Casady -- 6. Power and RF BJTs in 4H-SiC : Device Design and Technology / Anant Agarwal, Sei-Hyung Ryu, and John Palmour.
Sommario/riassunto	Annotation Learn the latest advances in SiC (Silicon Carbide) technology from the leading experts in the field with this new cutting-edge resource. The book is your single source for in-depth information on both SiC device fabrication and system-level applications. This comprehensive reference begins with an examination of how SiC is grown and how defects in SiC growth can affect working devices. Key issues in selective doping of SiC via ion implantation are covered with special focus on implant conditions and electrical activation of implants. SiC applications discussed include chemical sensors, motor-control components, high-temperature gas sensors, and high-temperature electronics. By cutting through the arcane data and jargon surrounding the hype on SiC, this book gives an honest assessment of today's SiC technology and shows you how SiC can be adopted in

developing tomorrow's applications.