Record Nr. UNINA9910878990703321 Autore Di Paolo Emilio Maurizio Titolo GaN Technology: Materials, Manufacturing, Devices and Design for Power Conversion / / edited by Maurizio Di Paolo Emilio Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 9783031632389 9783031632372 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (388 pages) Disciplina 621.3815 Electronic circuit design Soggetti Power electronics Materials **Electronics Design and Verification Power Electronics** Materials for Devices Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction to GaN Technology -- GaN Material Properties --Nota di contenuto Manufacturing Processes -- GaN Technology -- Applications of GaN Technology -- Case Studies -- Challenges and Future Trends --Positioning and perspectives of GaN based power devices -- GaN Market. Sommario/riassunto This book provides an extensive examination of the practical implementations and theoretical foundations of circuit design with Gallium Nitride (GaN) devices. Designed with scientists and engineers in mind, the advanced studies detailed in this book provide invaluable insights into new methodologies and approaches, serving as a comprehensive guide for those embarking on innovative design endeavors. Provides comprehensive reference on circuit design with

GaN devices; Includes industrial, automotive and consumer

applications; Explores manufacturing processes and reliability features.