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Nota di contenuto	Intro -- Contents -- About the Editors -- A New 51-Level Asymmetrical Inverter Circuit with Reduced Number of Components -- 1 Introduction -- 2 Suggested 51-Level MLI Circuit -- 3 Comparison Study -- 4 Simulation Results -- 5 Conclusion -- References -- Compact Power Supply for Induction Heating in Shrink Fitting -- 1 Introduction -- 2 Applications of Induction Heating -- 2.1 Industrial Applications -- 2.2 Domestic Applications -- 2.3 Medical Applications -- 2.4 Shrink-Fitting -- 3 Brief Survey of Converters Used in Induction Heating -- 3.1 Multi-output Voltage Source Inverter -- 3.2 Multilevel Neutral Point Clamped (MNPC) Inverter Topology -- 3.3 Dual-Mode Resonant Inverter -- 3.4 Interleaved Boost AC-AC Converter -- 3.5 Single-Switch Resonant Inverter -- 4 Selected Resonant Converter and Its Design -- 4.1 Modes of Operation -- 4.2 Design of Resonant Circuit -- 5 Simulation Results -- 6 Hardware Results -- 7 Conclusion -- References -- Investigation on Physics-Based Models of Lithium Ion

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Sommario/riassunto

This book presents select proceedings of the Electric Power and Renewable Energy Conference 2022 (EPREC-2022). It provides rigorous discussions, case studies, and recent developments in the emerging areas of power electronics, especially power inverters and converter, electrical drives, regulated power supplies, operation of FACTS and HVDC, etc. The readers would be benefited from enhancing their knowledge and skills in these domain areas. The book is a valuable reference for beginners, researchers, and professionals interested in advancements in power electronics and drives.