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Nota di contenuto	Cover -- Series Page -- Title Page -- Copyright Page -- Contents -- List of Contributors -- Preface -- Chapter 1 Analysis of Dual Two-Level Converters for Multilevel Performance -- 1.1 Introduction -- 1.2 Pros and Cons of Multilevel Converters -- 1.3 Applications of Multilevel Converters -- 1.4 Advantages of Dual Two-Level Converters -- 1.5 Problem Identification -- 1.6 Applications of Dual Two-Level Converters -- 1.7 Multilevel Performance of Dual 2-L 3-Phase Inverter Using ANN-Based PWM -- 1.7.1 Artificial Neural Network-Based PWM Approach -- 1.7.2 Simulation Results -- 1.8 Conclusion -- References -- Chapter 2 Multilevel Inverters: Classification, Approaches, and Its Application in Photovoltaic System -- 2.1 Introduction -- 2.2 Multilevel Inverters (MLIs) -- 2.2.1 Diode-Clamped/Neutral Point-Clamped Multilevel Inverter (DCMLI/NPCMLI) -- 2.2.2 Flying Capacitor/Capacitor-Clamped Multilevel Inverter (FC/CCMLI) -- 2.2.3 Cascaded H-Bridge Multilevel Inverter (CHBMLI) -- 2.2.4 Evolution of MLIs -- 2.3 Topologies for Multilevel Inverters With Reduced Switches -- 2.3.1 Symmetrical H-Bridge MLI -- 2.3.2 Asymmetrical H-Bridge MLI -- 2.3.3 Reduced Switch-Modified MLI
Sommario/riassunto	This book provides an in-depth analysis of multilevel converters,

focusing on their topologies, modulation techniques, and applications in various systems including photovoltaic and motor drives. It explores the advantages and challenges of different inverter types such as diode-clamped, flying capacitor, and cascaded H-bridge inverters. The text is aimed at professionals and researchers in the field of electrical engineering, offering insights into simulation results and practical applications in renewable energy and electric vehicle systems. The goal is to enhance understanding of multilevel converter technology for improved performance and efficiency.