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Sommario/riassunto	This book presents the design and operation of DC wind systems and their integration into power grids. The chapters give an in-depth discussion on turbine conversion systems that have been adapted for DC grids and address characteristics of wind turbines when converting kinetic wind energy to electrical energy, components associated with DC systems, and the design and analysis of DC grids. Additionally, the performance of medium voltage DC (MVDC) array grid and high voltage DC (HVDC) transmission grid connected via an offshore substation with DC/DC converters are also addressed. The book examines multiphase hybrid excitation generator systems for wind turbines and discusses its design and operation for all DC systems. The book provides an insight into the state-of-the-art technological advancements for existing and

futuristic wind generation schemes, and provides materials that will allow students, researchers, academics, and practicing engineers to learn, expand and complement their expertise. Provides detailed design, modelling and analysis from system to component level, for existing AC and all DC wind energy systems Presents tabulated and documented design procedures for multiphase hybrid excitation PM generators and associated turbine conversion system for wind turbines Provides analysis of medium voltage DC (MVDC) grids, DC/DC offshore substation and HVDC transmission grid Discusses high voltage generators, and insulation system for wind turbines.