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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Front Cover; About the Editor; Contents; Acknowledgment and How to Cite; List of Contributors; Introduction; Part I: Aerodynamics; Chapter 1: Wind Turbine Blade Design; Chapter 2: A Shrouded Wind Turbine Generating High Output Power with Wind-Lens Technology; Chapter 3: Ecomoulding of Composite Wind Turbine Blades Using Green Manufacturing RTM Process; Chapter 4: Aerodynamic Shape Optimization of a Vertical-Axis Wind Turbine Using Differential Evolution; Part II: Generators and Gear Systems Chapter 5: Performance Evaluation of an Induction Machine with Auxiliary Winding for Wind Turbine PowerChapter 6: Time Domain Modeling and Analysis of Dynamic Gear Contact Force in a Wind Turbine Gearbox with Respect to Fatigue Assessment; Part III: Tower and Foundation; Chapter 7: Wind Turbine Tower Vibration Modeling and Monitoring by the Nonlinear State Estimation Technique (NSET); Part IV: Control Systems; Chapter 8: Two LQRI Based Blade Pitch Controls for Wind Turbines; Chapter 9: Power Control Design for Variable-Speedwind Turbines
Sommario/riassunto	This important book presents a selection of new research on wind turbine technology, including aerodynamics, generators and gear

systems, towers and foundations, control systems, and environmental issues. This informative book: Introduces the principles of wind turbine design Presents methods for analysis of wind turbine performance Discusses approaches for wind turbine improvement and optimization Covers fault detection in wind turbines Describes mediating the adverse effects of wind turbine use and installation