

1. Record Nr.	UNINA9910260058203321
Autore	Chen Jin
Titolo	Wind turbine airfoils and blades : optimization design theory / / edited by Jin Chen, Quan Wang
Pubbl/distr/stampa	Berlin ; ; Boston : , : De Gruyter, , [2018] ©2018
ISBN	3-11-038374-8
Descrizione fisica	1 online resource (392 pages)
Collana	GREEN alternative energy resources ; ; volume 3
Disciplina	621.4/5
Soggetti	Wind turbines
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Frontmatter -- Preface / Chen, Jin -- Contents -- 1. Introduction -- 2. Aerodynamic characteristics of wind turbine airfoils -- 3. Integrated expressions of wind turbine airfoils -- 4. Theory of parametric optimization for wind turbine airfoils -- 5. Experiments on the wind turbine airfoil and data analysis -- 6. Aerodynamics of wind turbine rotors and tip-loss corrections -- 7. Integrated representations for wind turbine blade shapes -- 8. Shape optimization of wind turbine blades -- 9. Structural optimization of composite wind turbine blades -- 10. Analysis of the aeroelastic coupling of wind turbine blades -- 11. Aeroelastic stability analysis of two-dimensional airfoil sections for wind turbine blades -- References