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Autore	Xu Min (Industrial engineer)
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ISBN	3-11-057668-6 3-11-057662-7
Descrizione fisica	1 online resource (XI, 315 p.)
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Frontmatter -- Preface -- Contents -- Chapter 1 Introduction -- Chapter 2 Unsteady CFD technology -- Chapter 3 Numerical method for nonlinear structural response computation with geometric nonlinearity -- Chapter 4 Interpolation and moving-grid technique for CFD/CSD coupling program -- Chapter 5 CFD/CSD coupling solution technology -- Chapters 6 Reduced-order modeling techniques of nonlinear aeroelastic system -- Chapter 7 Aeroelastic software application based on CFD/CSD coupling method -- Index
Sommario/riassunto	The book provides a state-of-art overview of computational methods for nonlinear aeroelasticity and load analysis, focusing on key techniques and fundamental principles for CFD/CSD coupling in temporal domain. CFD/CSD coupling software design and applications of CFD/CSD coupling techniques are discussed in detail as well. It is an essential reference for researchers and students in mechanics and applied mathematics.