

1. Record Nr.	UNINA9910809688803321
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Titolo	Fixed and Flapping Wing Aerodynamics for Micro Air Vehicle Applications [[electronic resource]]
Pubbl/distr/stampa	Reston, : American Institute of Aeronautics and Astronautics, 2000
ISBN	1-60086-665-4 1-60086-446-5
Descrizione fisica	1 online resource (595 p.)
Collana	Progress in Astronautics and Aeronautics ; ; v.195
Disciplina	629.1 s 629.133/36
Soggetti	Aerodynamics Drone aircraft Micro air vehicles Ornithopters Mechanical Engineering Engineering & Applied Sciences Aeronautics Engineering & Astronautics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	""Cover""; ""Title""; ""Copyright""; ""Table of Contents""; ""Preface""; ""Chapter 1 An Overview of Micro Air Vehicle Aerodynamics""; ""I. Introduction""; ""II. Fixed Wing Vehicles""; ""III. Flapping Wing Vehicles""; ""IV. Concluding Remarks""; ""References""; ""Part I. Fixed Wing Aerodynamics""; ""Chapter 2 Higher-Order Boundary Layer Formulation and Application to Low Reynolds Number Flows""; ""I. Introduction""; ""II. Curvilinear Coordinates and Equations""; ""III. Equivalent Inviscid Flow""; ""IV. Entrainment Equation and Viscous/Inviscid Coupling"" ""V Integral Momentum and Kinetic Energy Equations"" ""VI. Turbulent Transport Equation""; ""VII. Real Viscous Flow Profiles""; ""VIII. Profile Families""; ""IX. Higher-Order Corrections""; ""X. High-Order Panel Method""; ""XI. Viscous/Inviscid System Formulation""; ""XII. Results""; ""XIII. Conclusions""; ""References""; ""Chapter 3 Analysis and Design of Airfoils for Use at Ultra-Low Reynolds Numbers""; ""I. Introduction""; ""II. Computational Analysis Methods""; ""III. Flowfield Assumptions""; ""IV. Grid Topology""; ""V. Comparison with Experiment""

""VI. Effects of Reynolds Number and Geometry Variations on Airfoil Performance""""VII. Airfoil Optimization""; ""VIII. Conclusions""; ""References""; ""Chapter 4 Adaptive, Unstructured Meshes for Solving the Navier-Stokes Equations for Low-Chord-Reynolds-Number Flows""; ""I. Introduction""; ""II. Approach""; ""III. The Finite Element Approximation""; ""IV. Fluid Solver""; ""V. Grid Generation and Adaptive Refinement""; ""VI. Results""; ""VII. Database Validation""; ""VIII. Ongoing Work""; ""IX. Conclusions""; ""Acknowledgment""; ""References"" ""Chapter 5 Wind Tunnel Tests of Wings and Rings at Low Reynolds Numbers""""I. Introduction""; ""II. Effect of Aspect Ratio and Planform on the Aerodynamic Lift and Drag""; ""III. Effect of Low Reynolds Numbers on the Lift and Drag of Ring Airfoils""; ""References""; ""Chapter 6 Effects of Acoustic Disturbances on Low Re Aerofoil Flows""; ""I. Introduction""; ""II. Experimental Arrangements""; ""III. Results""; ""IV. Discussion""; ""V. Potential Use of Sound to Improve Performance""; ""VI. Conclusions""; ""Acknowledgments""; ""References"" ""Chapter 7 Aerodynamic Characteristics of Low Aspect Ratio Wings at Low Reynolds Numbers""""I. Introduction""; ""II. Apparatus""; ""III. Procedures""; ""IV. Uncertainty""; ""V. Flow Visualization""; ""VI. Discussion of Results""; ""VII. Vortex-Lattice Method""; ""VIII. Conclusions""; ""Acknowledgments""; ""References""; ""Chapter 8 Systematic Airfoil Design Studies at Low Reynolds Numbers""; ""I. Introduction""; ""II. Design Process""; ""III. Parametric Studies in Airfoil Design""; ""IV. Summary and Conclusions""; ""Acknowledgments""; ""References"" ""Chapter 9 Numerical Optimization and Wind-Tunnel Testing of Low Reynolds Number Airfoils""

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