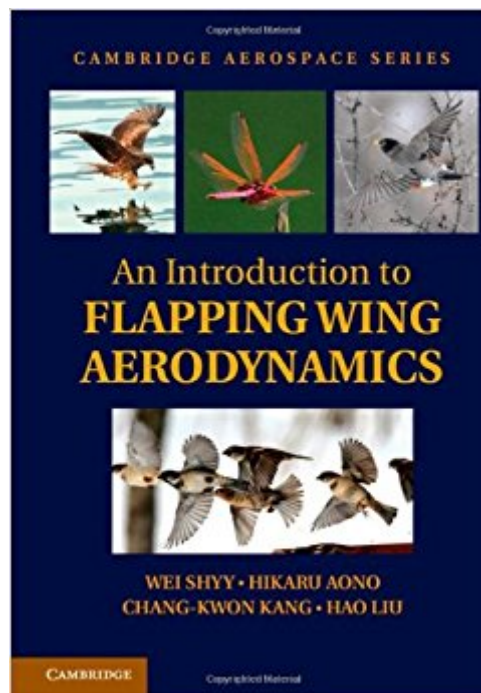




Ebook Directory
the best source of ebook

The book was found

An Introduction To Flapping Wing Aerodynamics (Cambridge Aerospace Series)



Synopsis

This is an ideal book for graduate students and researchers interested in the aerodynamics, structural dynamics, and flight dynamics of small birds, bats, and insects, as well as of micro air vehicles (MAVs), which present some of the richest problems intersecting science and engineering. The agility and spectacular flight performance of natural flyers, thanks to their flexible, deformable wing structures as well as to outstanding wing, tail, and body coordination, is particularly significant. To design and build MAVs with performance comparable to natural flyers, it is essential that natural flyers' combined flexible structural dynamics and aerodynamics are adequately understood. The primary focus of this book is to address the recent developments in flapping wing aerodynamics. This book extends the work presented in *Aerodynamics of Low Reynolds Number Flyers* (Shyy et al. 2008).

Book Information

Series: Cambridge Aerospace Series (Book 37)

Hardcover: 313 pages

Publisher: Cambridge University Press; 1 edition (August 19, 2013)

Language: English

ISBN-10: 1107037263

ISBN-13: 978-1107037267

Product Dimensions: 7 x 0.9 x 10 inches

Shipping Weight: 1.8 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #1,493,029 in Books (See Top 100 in Books) #114 in Books > Engineering & Transportation > Engineering > Aerospace > Aerodynamics #369 in Books > Engineering & Transportation > Engineering > Energy Production & Extraction > Mining #8026 in Books > Science & Math > Nature & Ecology > Conservation

Customer Reviews

This book is for anyone interested in the aerodynamics, structural dynamics, and flight dynamics of small birds, bats, and insects, as well as of micro air vehicles (MAVs). The primary focus of this book is on developments in flapping wing aerodynamics, and it extends the work presented in *Aerodynamics of Low Reynolds Number Flyers* (Shyy et al. 2008).

Dr Wei Shyy is the Provost of the Hong Kong University of Science and Technology and formerly

Clarence L. 'Kelly' Johnson Collegiate Professor and Department Chair of Aerospace Engineering at the University of Michigan. Shyy is the author or a co-author of four books and numerous journal and conference articles dealing with a broad range of topics related to aerial and space flight vehicles. He is General Editor of the Cambridge Aerospace Book Series (Cambridge University Press) and Co-Editor-in-Chief of the nine-volume Encyclopedia of Aerospace Engineering (2010). He has received the 2003 AIAA Pendray Aerospace Literature Award and the ASME 2005 Heat Transfer Memorial Award. He has led multi-university centers under the sponsorship of NASA, the US Air Force Research Laboratory and industry. His professional views have been quoted in various news media, including the New York Times and USA Today. Dr Hikaru Aono is a Research Scientist at the Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency. He has made contributions to biological aerodynamics and related fluid-structure interaction issues. Dr Chang-kwon Kang is a Postdoctoral Research Fellow at the University of Michigan. His expertise includes analytical and computational modeling of the performance of flapping wings for micro air vehicles, aeroelastic dynamics of flapping wings and other complex systems. Dr Hao Liu is a Professor of Biomechanical Engineering in the Graduate School of Engineering at Chiba University in Japan and a Chair Professor at Shanghai Jiao Tong University in China. He is well known for his contributions to biological, flapping-flight research and biomimetics for micro air vehicles, including original publications on insect aerodynamics simulations. His professional views have been quoted in several news media, including the NHK and the Science Channel Network of the Japan Science and Technology Agency.

[Download to continue reading...](#)

An Introduction to Flapping Wing Aerodynamics (Cambridge Aerospace Series) Fixed and Flapping Wing Aerodynamics for Micro Air Vehicle Applications (Progress in Astronautics and Aeronautics) Rebel Wing (Rebel Wing Trilogy, Book 1) (Rebel Wing Series) Wing Chun: Beginning Wing Chun: The Ultimate Guide To Starting Wing Chun (Martial Arts, Self Defence, Kung Fu, Bruce Lee) A History of Aerodynamics: And Its Impact on Flying Machines (Cambridge Aerospace Series) Applied Computational Aerodynamics: A Modern Engineering Approach (Cambridge Aerospace Series) Principles of Helicopter Aerodynamics with CD Extra (Cambridge Aerospace) Eyes Turned Skyward: An Introduction to Aerospace Engineering with Emphasis on Aerodynamics and Aircraft Performance Analysis Storm Fall (Rebel Wing Trilogy, Book 2) (Rebel Wing Series) Fundamentals of Aerodynamics (Mcgraw-Hill Series in Aeronautical and Aerospace Engineering) Wing Chun Warrior: The True Tales of Wing Chun Kung Fu Master Duncan Leung, Bruce Lee's Fighting Companion Foundations of Aerodynamics: Bases of Aerodynamics Design Wing Chun Power

Punching Blueprint for Self Defence (Wing Chun Power Training Book 1) Theory of Aerospace Propulsion, Second Edition (Aerospace Engineering) Theory of Aerospace Propulsion (Aerospace Engineering) Analysis of Aircraft Structures: An Introduction (Cambridge Aerospace Series) Introduction to Structural Dynamics and Aeroelasticity (Cambridge Aerospace Series, Vol. 15) Introduction to Structural Dynamics and Aeroelasticity (Cambridge Aerospace Series) Spacecraft Dynamics and Control: A Practical Engineering Approach (Cambridge Aerospace Series) Nonequilibrium Gas Dynamics and Molecular Simulation (Cambridge Aerospace Series)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)