

E-book Price

US\$ 129.00

Print-on-Demand

USS 215.00

Institutional E-Book Price US\$ 516.00

Editor: Yucheng Liu USA

elSBN: 978-1-68108-305-6

Frontiers in Aerospace Science (Volume 1) Aerospace Structures and Materials

/www.ebooks.benthamscience.com/book/9781681083056

About the eBook

This comprehensive volume presents a wide spectrum of information about the design, analysis and manufacturing of aerospace structures and materials. Readers will find an interesting compilation of reviews covering several topics such as structural dynamics and impact simulation, acoustic and vibration testing and analysis, fatigue analysis and life optimization, reversing design methodology, non-destructive evaluation, remotely piloted helicopters, surface enhancement of aerospace alloys, manufacturing of metal matrix composites, applications of carbon nanotubes in aircraft material design, carbon fiber reinforcements, variable stiffness composites, aircraft material selection, and much more.

Contents

- Analysis of Linear/Non-Linear Aeroelastic Response of Supersonic Thick Fins
- An Analytical and Experimental Investigation into Vibratory Force for Aircraft Wings
- Computational and Analytical Investigation of Lateral Impact Behavior of Pressurized Pipelines
- Effect of Bondline Thickness on the Tractionseparation Laws of Adhesively Bonded Joint
- Optimization of Geometric Parameters and Reversing Design Methodology of Investment
- Vibration Induced Fatigue Analysis of Aerospace Structures
- Fatigue Life Optimization of Laser Peened Aircraft Components
- Prediction of Residual Stress Relaxation in Ti-6Al-4V subjected to Laser Peening
- Non-Destructive Evaluation (NDE) of Welded Structures for Aerospace Applications
- Development of a Remotely Piloted Helicopter for Civil Applications
- Materials Selection in Design of Structures of Subsonic and Supersonic Aircrafts
- Potential Aerospace Applications of Carbon Nanotubes
- Combination of Carbon Fiber Sheet Molding Compound and Pre-Impregnated, Tailored Carbon Fiber Reinforcements
- Design Optimization of Variable Stiffness Composite Structures for Aerospace Applications
- Manufacturing Challenges Associated with the Use of Metal Matrix Composites in Aerospace

For Advertising Inquiries: Contact: marketing@benthamscience.org

