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Autore	Abramovich Haim
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Nota di contenuto	Frontmatter -- Preface -- Contents -- 1. Introduction -- 2. Composite materials -- 3. Design formulas -- 4. Introduction to fatigue -- 5. Introduction to crack propagation analysis -- 6. Buckling of thin-walled structures -- 7. Vibrations of thin-walled structures -- 8. Dynamic buckling of thin-walled structures -- 9. Optimization of thin-walled structures -- 10. Structural health monitoring (SHM) -- Index
Sommario/riassunto	Advanced Aerospace Materials is intended for engineers and students of aerospace, materials, and mechanical engineering. It covers the transition from aluminum to composite materials for aerospace structures and will include essential and advanced analyses used in today's aerospace industries. Various aspects of design, failure and monitoring of structural components will be derived and presented accompanied by relevant formulas and analyses.