1.	Record Nr.	UNINA9910809690203321
	Titolo	Aerospace thermal structures and materials for a new era [[electronic resource] /] / edited by Earl A. Thornton
	Pubbl/distr/stampa	Reston, Va., : American Institute of Aeronautics and Astronautics, Inc., 1995
	ISBN	1-60086-636-0 1-60086-417-1
	Descrizione fisica	1 online resource (400 pages) : illustrations
	Collana	Progress in astronautics and aeronautics ; ; v. 168
	Altri autori (Persone)	ThorntonEarl A
	Soggetti	Space vehicles - Thermodynamics
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	"Technical papers selected from the second University of Virginia Thermal Structures Conference, Charlottesville, Virginia, October 18- 20, 1994, and subsequently revised for this volume."
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	 ""Cover"; ""Title"; ""Copyright"; ""Preface"; ""Table of Contents"; ""Chapter 1. Analysis of Thermal Structures"; ""Numerical Modeling of a Cryogenic Fluid within a Fuel Tank"; ""Thermocryogenic Buckling and Stress Analyses of a Partially Filled Cryogenic Tank Subjected to Cylindrical Strip Heating"; ""Random Vibration of Thermally Buckled Plates"; ""On Thermally-Induced Vibrations of Structures in Space"; ""Transient Thermal-Structural Response of a Space Structure with Thermal Control Materials"; ""Chapter 2. Experimental Studies of Thermal Structures"" ""Boundary Conditions for Aerospace Thermal-Structural Tests"""" Inverse Analysis for Structural Boundary Condition Characterization of a Panel Test Fixture"; ""An Experimental Investigation of Thermally Induced Vibrations of Spacecraft Structures"; ""Chapter 3. Analysis of High Temperature Composites"; ""Micromechanical Analysis of Thermal Response in Textile-Based Composites"; ""Recent Advances in the Sensitivity Analysis for the Thermomechanical Postbuckling of Composites Panels""

Behavior""; ""Minimizing Thermal Deformation by Using Layered Structures""; ""Harmonic Generalized Thermoelastic Waves in Anisotropic Laminated Compsosites""; ""The Superplastic Deformation Behavior of Physical Vapor Deposited Ti-6AI-4V""; ""Chapter 4. Performance of Aircraft Materials""; ""Aluminum Alloys for Subsonic Aircraft""; ""Materials Requirements for Aircraft Engines""; ""Benefits Estimation of New Engine Technology Insertion""; ""Author Index for Volume""