Record Nr. UNINA9910827022103321 Advanced hypersonic test facilities [[electronic resource] /] / edited by Titolo Frank Lu, Dan Marren Pubbl/distr/stampa Reston, Va., : American Institute of Aeronautics and Astronautics, c2002 **ISBN** 1-60086-667-0 1-60086-448-1 Descrizione fisica 1 online resource (646 p.) Collana Progress in astronautics and aeronautics; v. 198 Altri autori (Persone) LuFrank K MarrenDan E Disciplina 629.132306 Soggetti Aerodynamics, Hypersonic Hypersonic wind tunnels Ballistic ranges Rocket sleds Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. ""Cover"": ""Title"": ""Copyright"": ""Table of Contents"": ""Preface"": Nota di contenuto ""Chapter 1 Hypersonic Ground Test Requirements""; ""I. Introduction""; ""II. History, Status, and Outlook for Hypersonic Test Requirements""; ""III. Potential Civilian Hypersonic Test Requirements Futures""; ""A. Planetary Exploration""; ""B. Access to Space""; ""IV. Military Hypersonic Test Requirements Futures""; ""A. Access to Space""; ""B. Missiles""; ""V. Conclusion"": ""References"": ""Chapter 2 Principles of Hypersonic Test Facility Development""; ""I. Introduction""; ""II. Critical Hypersonic Technologies"" ""III. Hypersonic Scaling""""IV. High Enthalpy and High Speed""; ""V. Types of Hypersonic Facilities""; ""VI. Conclusions""; ""Acknowledgments""; ""References""; ""Chapter 3 NASA's HYPULSE Facility at GASL A Dual Mode, Dual Driver Reflected-Shock/Expansion Tunnel""; ""I. Introduction""; ""A. Background""; ""B. Scope of the Chapter""; ""II. Shock Tunnels and Expansion Tubes""; ""A. Shock-Heated Facilities""; ""B. Reflected-Shock Tunnels""; ""C. Shock-Expansion Tubes""; ""III. Driver Methods""; ""A. Lighter Gases""; ""B.

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