

1. Record Nr.	UNINA9910806267303321
Titolo	Fundamentals of hybrid rocket combustion and propulsion [[electronic resource] /] / edited by Martin J. Chiaverini, Kenneth K. Kuo
Pubbl/distr/stampa	Reston, Va., : American Institute of Aeronautics and Astronautics, c2007
ISBN	1-60086-687-5 1-60086-468-6
Descrizione fisica	1 online resource (665 p.)
Collana	Progress in astronautics and aeronautics ; ; v. 218
Altri autori (Persone)	ChiaveriniMartin J <1968-> (Martin John) KuoKenneth K
Disciplina	629.47/52
Soggetti	Hybrid propellant rockets Rocket engines - Combustion Rockets (Aeronautics) - Fuel
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.
Nota di contenuto	""Cover""; ""Title""; ""Copyright""; ""Preface""; ""Acknowledgements""; ""Table of Contents""; ""Chapter 1. Overview and History of Hybrid Rocket Propulsion""; ""Chapter 2. Review of Solid-Fuel Regression Rate Behavior in Classical and Nonclassical Hybrid Rocket Motors""; ""Chapter 3. Solid-Fuel Pyrolysis Phenomena and Regression Rate, Part 1: Mechanisms""; ""Chapter 4. Solid-Fuel Pyrolysis Phenomena and Regression Rate, Part 2: Measurement Techniques""; ""Chapter 5. Analytical Models for Hybrid Rockets""; ""Chapter 6. Vortex Injection Hybrid Rockets"" ""Chapter 7. High-Speed Flow Effects in Hybrid Rockets""""Chapter 8. Computational Fluid Dynamics Modeling of Hybrid Rocket Flowfields""; ""Chapter 9. Combustion Instability and Transient Behavior in Hybrid Rocket Motors""; ""Chapter 10. Metals, Energetic Additives, and Special Binders Used in Solid Fuels for Hybrid Rockets""; ""Chapter 11. Hydrogen Peroxide, Hydroxyl Ammonium Nitrate, and Other Storable Oxidizers""; ""Chapter 12. Similarity and Scaling Effects in Hybrid Rocket Motors""; ""Chapter 13. Large-Scale Hybrid Motor Testing"" ""Chapter 14. Flight Testing of Hybrid-Powered Vehicles""""Chapter 15. Challenges of Hybrid Rocket Propulsion in the 21st Century""; ""Index""

