

1. Record Nr.	UNINA9910810023103321
Titolo	Liquid rockets and propellants [[electronic resource]] : a selection of technical papers based mainly on a symposium of the American Rocket Society ... // edited by Loren E. Bollinger, Martin Goldsmith, Alexis W. Lemmon, Jr
Pubbl/distr/stampa	New York, : Academic Press, 1960
ISBN	1-60086-475-9 1-60086-256-X
Descrizione fisica	1 online resource (698 p.)
Collana	Progress in astronautics and rocketry ; ; v. 2
Altri autori (Persone)	BollingerLoren E GoldsmithMartin LemmonAlexis W
Disciplina	629.4222
Soggetti	Liquid propellant rockets
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.
Nota di contenuto	""Cover""; ""Title""; ""Copyright""; ""Liquid Rockets Committee and Propellants and Combustion Committee""; ""Contributors to Volume 2""; ""Preface""; ""Contents""; ""A. Simulated High-Altitude Testing of Rockets""; ""Experimental Investigation of Exhaust Diffusers for Rocket Engines""; ""Summary of Experience in the Use of Exhaust Diffusers for Rocket Testing""; ""Short Diffuser for Testing Rocket Nozzles""; ""A Large Rocket Ejector System""; ""Development of an Exhaust Diffuser for Ground Testing Rocket Engines""; ""B. Instrumentation for Combustion Instability"" ""Instrumentation for Research on Combustion Instability in Solid-Propellant Rocket Motors"" ""Some Instrumentation for Combustion Stability Research""; ""An Integrated Combustion Instability Recording and Analysis Installation""; ""High Frequency Pressure Instrumentation for Rocket Instability Studies""; ""Instrumentation for Studies of Unstable Burning Phenomena""; ""C. Liquid Propellant Combustion""; ""Monodisperse Spray Deflagration""; ""A Two-Wavelength Interferometric Technique for the Study of Vaporization and Combustion of Fuels""

"An Experimental Study of RP-1, UDMH and N₂H₄ Single-Droplet Burning in Air and in Oxygen"; "D. Reaction Kinetics"; "The Reaction of Diborane and Oxygen under Explosive and Pre-Explosive Conditions"; "Consideration of Hydrazine Decomposition"; "Detonability of Ozone and Nitric Oxide"; "Nonequilibrium Chemical Recombination Effects in Exhaust Nozzle Flow: An Approximate Method"; "Spectroscopic Techniques for the Determination of Flame Temperatures: Total Radiation Techniques"; "Production and Properties of Liquid Ozone and Liquid Ozone-Oxygen Mixtures, A Review"

"E. Propellant Selection"; "Liquid Propellant Comparison Based on Vehicle Performance"; "Comparative Applicability of Storable Propellants: Effects of Specific Impulse and Density"; "F. Rocket Engine Design"; "Investigation of a Gas-Driven Jet Pump for Rocket Engines"; "Analysis of Pressure Feasibility Limits in Regenerative Cooling of Combustion Chambers for Large-Thrust Rockets"; "Fabrication, Structural and Heat Transfer Considerations of Electroformed Rocket Nozzles"; "Design of Catalyst Packs for the Decomposition of Hydrogen Peroxide"; "Variable Thrust Rocket Engines"

"Starting Transients of Hypergolic Bipropellant Rockets"; "Analysis of a New Concept Rocket Nozzle"
