

1. Record Nr.	UNINA9910781699203321
Titolo	Flames, lasers, and reactive systems // editors, J.R. Bowen [et al.]
Pubbl/distr/stampa	New York, : American Institute of Aeronautics and Astronautics, Inc., c1983
ISBN	1-60086-561-5 1-60086-342-6
Descrizione fisica	1 online resource (461 pages) : illustrations, charts
Collana	Progress in astronautics and aeronautics ; ; v. 88
Altri autori (Persone)	BowenJ. R (J. Raymond)
Disciplina	629.1 s 621.402/3
Soggetti	Flame Lasers Explosions
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Companion vol. to the colloquium's Shock waves, explosions, and detonations. "Technical papers selected from the eighth International Colloquium on Gasdynamics of Explosions and Reactive Systems, Minsk, USSR, August 1981, and subsequently revised for this volume."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""Cover""; ""Title""; ""Copyright""; ""Table of Contents""; ""Preface""; ""Chapter I. Laminar Flames""; ""Resonant Response of a Flat Flame Near a Flame-Holder""; ""Temperature and Pressure Effects in Cool and Blue Flames""; ""An Excess Enthalpy Flame Stabilized in Ceramic Tubes""; ""Chapter II. Turbulent Flames""; ""Differential Diffusion Effects on Measurements in Turbulent Diffusion Flames by the Mie Scattering Technique""; ""Concentration and Velocity Measurements in a Turbulent Reacting Mixing Layer""; ""Turbulent Combustion Zone in a Tubular Reactor"" ""Premixed Turbulent Flames Interplay of Hydrodynamic and Chemical Phenomena"" ""Modification of Turbulent Flowfield by an Oblique Premixed Hydrogen-Air Flame""; ""Chapter III. Combustion of Solids""; ""Combustion of Lithium Perchlorate, Ammonium Chloride-Ammonium Perchlorate Solid Mixtures""; ""Radiation from Polyurethane Pile Fires""; ""Study of Condensed System Flames by Molecular Beam Mass Spectrometry ""; ""Unsteady Burning of Double-Base Propellants"";

""Surface Layer Destruction during Combustion of Homogeneous Powders""

""Heat Transfer Ahead of Flame Spreading over a Cured Epoxy Resin Surface in an Opposed Flow """"Chapter IV. Ignition and Extinction."";

""Self-Ignition of Atomized Liquid Fuel in Gaseous Medium"";

""Hydrocarbon Induced Acceleration of Methane-Air Ignition"";

""Extinction of In-Flight Engine Fuel-Leak Fires with Dry Chemicals"";

""Chapter V. Nonequilibrium Systems""; ""Linearized Kinetic Models for

Polyatomic Gases and Mixtures of Gases: Application to Vibrationally Relaxing Flows""; ""Theoretical Model for Sound Output from a

Pulsating Arc Discharge""; ""Chapter VI. Lasers""

""Gain Coefficient and Vibrational Temperature Measurements in Shock Tube Driven CO<sub>2</sub>-GDL, CO<sub>2</sub> + N<sub>2</sub> + He, and CO<sub>2</sub> + CO(N<sub>2</sub>) + H<sub>2</sub>

Mixtures"" ""Time-Dependent Nozzle and Base Flow/Cavity Model for

CW Chemical Laser Flowfield""; ""Numerical Modeling of a Chemically

Driven H<sub>2</sub>-HC<sub>1</sub> Transfer Laser""; ""A Gasdynamic Laser Using Products

of Acetylene Explosions""; ""Influence of Flow Structure on Optical Gain

in Gasdynamic Lasers""; ""Operation of Arc-Heated Gasdynamic CO<sub>2</sub>

Laser at 16.4-18.6 (um)m""; ""Author Index""

---