Record Nr. UNINA9910781699703321 Flames and configurations / / editors, J.R. Bowen, J.-C. Leyer, R.I. **Titolo** Soloukhin Pubbl/distr/stampa New York:,: American Institute of Aeronautics and Astronautics,, 1986 **ISBN** 1-60086-579-8 1-60086-360-4 Descrizione fisica 1 online resource (436 pages): illustrations Collana Progress in astronautics and aeronautics; v. 105 Altri autori (Persone) BowenJ. R (J. Raymond) LeverJ.-C SoloukhinR. I (Rem Ivanovich) Disciplina 629.1 s 662/.2 Soggetti Flame Configurations Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "Technical papers presented from the tenth International Colloquium" on Dynamics of Explosions and Reactive Systems, Berkeley, California, August 1985, and subsequently revised for this volume. Nota di bibliografia Includes bibliographical references and index. ""Cover"": ""Title"": ""Copyright"": ""Table of Contents"": ""Preface"": Nota di contenuto ""The Beauty of Combustion Fields and Their Aerothermodynamic Significance""; ""Vortex Methods for the Study of Turbulent Combustion at a Low Mach Number""; ""Chapter I Flame Ignition and Propagation""; ""Numerical Analysis of Ignition of Hydrogen Spurted Into Air""; ""Flame Jet Ignition of Lean Fuel-Air Mixtures""; ""Inhibitory Action of Preflame Reactions on Flame Propagation in End Gas""; ""Ignition Modeling with Grid Adaptation""; ""Consequence of Temperature-Pressure-Time History for Autoignition"" ""Pulsed X-Ray and Optical Investigators of Unsteady High Velocity Jets Propagating in Gases" ""Chapter II Diffusion and Premixed Flames"; ""Interaction of a Laminar Flame with Its Self-Generated Flow during Constant Volume Combustion""; ""Cellular Flame Structures on a Cooled Porous Burner""; ""Effects of Equilibrium Dissociation on the Structure and Extinction of Laminar Diffusion Flames""; ""Effect of Curvature and Dilution on Unsteady, Premixed, Laminar Flame Propagation"": ""Simple

Models of Constant-Speed Flames in Three Partially Confined Geometries"

""Two Adjacent, Coupled Laminar Diffusion Flames with Cylindrical Symmetry"" ""Chemical Reactions in a Transient Natural Convective Boundary Layer""; ""Flame Propagation Through a Layer with Varying Equivalence Ratio""; ""One-Dimensional Flame with Extended Reaction Zone""; ""Simulation of Stoichiometric Acetylene/, Ethylene/, Ethane/, and Methane/Air Premixed Flames""; ""Chapter III Flame Instabilities and Acoustic Interactions""; ""A Correlation Between Flame Structures and Acoustic Instabilities""; ""Stability Study of an Oblique Flame Front Model""

""The Evolution of the Transverse Gas Velocity Spectrum Ahead of a Weakly Turbulent Hydrogen Flame"" ""An Experimental Analysis of Noise Sources in a Dump Combustor""; ""Chapter IV Practical Combustion Configurations""; ""A Numerical Model of a Pulse Combustor""; ""Radiation and Size Scaling of Large Gas and Gas/Oil Diffusion Flames""; ""Experimental and Theoretical Study of Thermal Radiation from Freely Burning Kerosene Pool Fires""; ""Residence Time in Flow Combustor""; ""Author Index""