Record Nr. UNINA9910781405203321 Dynamics of deflagrations and reactive systems [[electronic resource]]: **Titolo** heterogeneous combustion / / edited by A.L. Kuhl ... [et al.] Pubbl/distr/stampa Washington, D.C.,: American Institute of Aeronautics and Astronautics, c1991 **ISBN** 1-60086-605-0 1-60086-386-8 Descrizione fisica 1 online resource (407 p.) Collana Progress in astronautics and aeronautics; v. 132 Altri autori (Persone) KuhlA. L Disciplina 629.1 s 541.3/61 Soggetti Combustion Gas dynamics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "Technical papers presented from the Twelfth International Colloquium" Note generali on Dynamics of Explosions and Reactive Systems, Ann Arbor, Michigan, July 1989, and subsequently revised for this volume." Includes bibliographical references and index. Nota di bibliografia ""Cover""; ""Title""; ""Copyright""; ""Table of Contents""; ""Preface""; Nota di contenuto ""Chapter I. Combustion of Dust-Air Mixtures""; ""Deflagration and Detonation Combustion of Dust Mixtures""; ""Experiments on Unconfined Dust-Air Flames""; ""Critical Dust Layer Thickness for Combustion of Grain Dust""; ""Particle Segregation Effects on the Combustion Safety of Dust-Containing Systems""; ""Experimental Measurement of the Aerodynamic Entrainability of Dust Deposits": ""Starch Dust Combustion Characteristics in a Closed Spherical Vessel"" ""Determination of Turbulence Parameters in Closed Explosion Vessels"""Numerical Study on Gas-Solid Two-Phase Nozzle and Jet Flow""; ""Chapter II. Droplet Combustion""; ""New Apparatus and its Performance for Free Droplet Combustion Under Microgravity": ""Water-Gas Shift Reaction in Droplet Burning"; ""Liquid-Waste Incineration in a Parallel-Stream Configuration: Effect of Auxiliary Fuel"": ""Spray Dynamics and Fuel Vapor Distributions in a Spinning Combustion Chamber""; ""Ignition of Liquid Fuel Drops in Shock Waves""; ""Chapter III. Combustion At Solid and Liquid Surfaces"" ""Oxidation of a Porous Graphite Cylinder with Airflow Through a

Coaxial Hole"""Premixed Flame in a Radiatively Active Porous Medium Under the External Radiant Heating""; ""Major Factors Influencing Flame Spreading Over Solid Fuel Layer""; ""Combustion Kinetic of a Homogeneous Double Base Propellant: Pseudo-Detailed and Global Mechanism""; ""Radiative Heat Flux and Energy Balance at the Surface of a Small Scale Kerosene Pool Fire""; ""Velocity and Temperature Measurements in a Bidimensional Pool Fire: Influence of a Vertical Wall Close to the Fire""; ""Chapter IV. Combustion Diagnostics"" ""Fluorescence Measurements in Laminar Nonpremixed Flames of CH4/N2"""Speckle Tomography of Unsteady Gasdynamic Objects""; ""Spectroscopic Measurements of Hydroxyl Radical in Axisymmetric Hydrogen-Air Diffusion Flames""; ""Re-Evaluation of Laser Schlieren Data for Acetylene Pyrolysis""; ""Author Index""