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Sommario/riassunto

The four companion volumes on Dynamic Aspects of Detonations and Explosion Phenomena and Dynamics of Gaseous and Heterogeneous Combustion and Reactive Systems present 111 of the 230 papers given at the Thirteenth International Colloquium on the Dynamics of Explosions and Reactive Systems held in Nagoya, Japan. These books embrace the topics of explosions, detonations, shock phenomena, and reactive flow, as well as the gasdynamic aspects of nonsteady flow in combustion systems, the fluid mechanics aspects of combustion, and diagnostic techniques. Two of the volumes, Dynamics of Gaseous Combustion (Vol. 151) and Dynamics of Heterogeneous Combustion and Reacting Systems (Vol. 152), focus on the processes of coupling the exothermic energy release with the fluid mechanics occurring in various combination processes. The other two volumes, Dynamic Aspects of Detonations (Vol. 153) and Dynamic Aspects of Explosion Phenomena (Vol. 154), address the rate processes of energy deposition in a compressible medium and the concurrent nonsteady flow as it typically occurs in explosion phenomena.
