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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	pt. 1. Exothermicity -- pt. 2. Field -- pt. 3. Explosion.
Sommario/riassunto	Combustion systems are confined fields of compressible fluids where exothermic processes of combustion take place, subject to conditions imposed at their boundaries. The subject of Dynamics of Combustion Systems is presented in three parts: Part 1. Exothermicity – considering the thermodynamic effects due to evolution of exothermic energy in a combustion system Chapter 1. Thermodynamic Aspects Chapter 2. Evolutionary Aspects Chapter 3. Heat Transfer Aspects Chapter 4. Chemical Kinetic Aspects Part 2. Field– exposing the dynamic properties of flow fields where the exothermic energy is deposited Chapter 5. Aerodynamic Aspects Chapter 6. Random Vortex Method Chapter 7. Gasdynamic Aspects Chapter 8. Gasdynamic Fronts Part 3. Explosion – revealing the dynamic features of fields and fronts due to rapid deposition of exothermic energy Chapter 9. Blast Waves Chapter 10. Self-Similar Blast Wave Chapter 11. Phase Space Method Chapter 12. Detonations.