1. Record Nr. UNINA9910457217603321

Titolo	Advances in combustion science [[electronic resource]] : in honor of Ya. B. Zel'dovich / / edited by William A. Sirignano, Alexander G. Merzhanov, Luigi De Luca
Pubbl/distr/stampa	Reston, Va., : American Institute of Aeronautics and Astronautics, Inc., 1997
ISBN	1-60086-645-X 1-60086-426-0
Descrizione fisica	1 online resource (374 p.)
Collana	Progress in astronautics and aeronautics ; ; v. 173
Altri autori (Persone)	LucaLuigi De MerzhanovAleksandr Grigorevich SirignanoW. A ZeldovichIA. B (IAkov Borisovich)
Disciplina	629.47
Soggetti	Combustion Combustion engineering Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""Cover""; ""Title""; ""Copyright""; ""Table of Contents""; ""Preface""; ""Biography""; ""I. Flame Theory""; ""Chapter 1 Zel'dovich's Accomplishments in Combustion Science""; ""Chapter 2 Combustion Theory in the Post-Zel'dovich Period""; ""Chapter 3 Nonequilibrium Theory of Flame Propagation""; ""Chapter 4 Triple Flames as Agents for Restructuring of Diffusion Flames""; ""Chapter 5 Kinetic Foundation of Thermal Flame Theory""; ""II. Heterogeneous Combustion""; ""Chapter 6 Filtration Combustion""; ""Chapter 7 Metal Slurry Droplet and Spray Combustion"" ""Chapter 8 Flame Spread Across Condensed Combustibles""""Chapter 9 Phenomenon of Nonthermal Propagation of Flameand Nonlinear Chain Branching""; ""III. Unsteady and Cellular Combustion""; ""Chapter 10 Cellular Flame Patterns and Dynamics""; ""Chapter 11 Numerical Simulation of Unsteady Combustion""; ""Color Plates""; ""Chapter 12 Intrinsic Stability of Energetic Solids Burning under Thermal Radiation"";

""IV. Turbulent Combustion""; ""Chapter 13 Turbulent Combustion Modeling: Ignition and Initial Period of Propagation""
""Chapter 14 Flame Curvature as a Determinant of Preferential Diffusion Effects in Premixed Turbulent Combustion""""Chapter 15 Gasdynamic Model of Turbulent Exothermic Fields in Explosions""; ""Color Plates"";
""Chapter 16 Combustion Theory and Conditional Moment Closure Modeling""; ""V. Explosions and Detonations""; ""Chapter 17 Nonequilibrium Phenomena in Combustion and Explosion""; ""Chapter 18 Initiation of Detonation by a Hypervelocity Projectile""; ""Chapter 19 Theory of Gaseous Detonations""; ""Chapter 20 Modern View of Gas Detonation Mechanisms""
""Chapter 21 Zel'dovich Theory of Detonability Limits""""Author Index""

2. Record Nr. UNINA9911019870203321

Autore	Sagar Shrddha
Titolo	Cyber Physical Energy Systems
Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2025 ©2024
ISBN	9781394173006 1394173008 9781394172986 1394172982 9781394172993 1394172990
Edizione	[1st ed.]
Descrizione fisica	1 online resource (564 pages)
Altri autori (Persone)	PoongodiT DhanarajRajesh Kumar SanjeevikumarPadmanaban <1978->
Disciplina	621.31
Soggetti	Microgrids (Smart power grids) - Security measures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cover -- Series Page -- Title Page -- Copyright Page -- Contents -- Preface -- Chapter 1 Cyber-Physical Systems: A Control and Energy

Sommario/riassunto

This book is essential for understanding the transformative integration of cyber-physical systems in smart grids, providing valuable insights that will shape the future of sustainable energy production and distribution. A novel modeling methodology that blends cyber and physical components is a significant advancement for future energy systems. A Cyber-Physical System (CPS) is an integrated component of physical microgrids that combines computers, wireless connections, and controls to create a holistic solution. As a result of cyber-physical systems, a new generation of engineering systems incorporating wireless communication has begun to emerge. Despite that there are various major CPS systems in use today, one of the most challenging sectors for implementation is the smart grid which aims to distribute dependable and efficient electric energy while maintaining a high level of global environmental sustainability. Smart grids incorporate advanced monitoring to ensure a secure, efficient energy supply, enhancing generator and distributor performance while offering consumers more choices. These systems aim to boost the capacity and responsiveness of energy production, transmission, distribution, and consumption. As renewable energy sources grow, traditional methods are being challenged, requiring cross-domain integration of energy systems and data. This book explores architectures and methods for integrating cutting-edge technology into the power grid for more sustainable energy production and distribution.