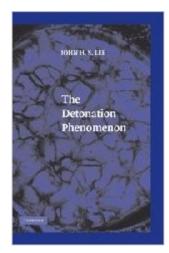


The book was found

The Detonation Phenomenon





Synopsis

This book introduces the detonation phenomenon in explosives. It is ideal for engineers and graduate students with a background in thermodynamics and fluid mechanics. The material is mostly qualitative, aiming to illustrate the physical aspects of the phenomenon. Classical idealized theories of detonation waves are presented first. These permit detonation speed, gas properties ahead and behind the detonation wave, and the distribution of fluid properties within the detonation wave itself to be determined. Subsequent chapters describe in detail the real unstable structure of a detonation wave. One-, two-, and three-dimensional computer simulations are presented along with experimental results using various experimental techniques. The important effects of confinement and boundary conditions and their influence on the propagation of a detonation are also discussed. The final chapters cover the various ways detonation waves can be formed and provide a review of the outstanding problems and future directions in detonation research.

Book Information

Hardcover: 400 pages Publisher: Cambridge University Press (June 30, 2008) Language: English ISBN-10: 0521897238 ISBN-13: 978-0521897235 Product Dimensions: 7 x 1 x 10 inches Shipping Weight: 2.2 pounds (View shipping rates and policies) Average Customer Review: 5.0 out of 5 stars 1 customer review Best Sellers Rank: #773,627 in Books (See Top 100 in Books) #154 inà Â Books > Science & Math > Physics > Waves & Wave Mechanics #667 inà Â Books > Science & Math > Physics > Dynamics #776 inà Â Books > Textbooks > Science & Mathematics > Mechanics

Customer Reviews

"The book is self-contained, providing the necessary historical and technical material appropriate for a reader that has an undergraduate background in thermodynamics and compressible fluid mechanics but no knowledge of detonation...Lee's treatment is extensive but deliberately not encyclopedic...In meeting this goal, I think he has admirably succeeded."Joseph E. Shepherd, Paul Thibault, AIAA Journal"Any researcher or student with even a passing interest in detonation will want to own Lee's book." -Joseph E. Shepherd, Paul Thibault, AIAA Journal This book introduces the detonation phenomenon to engineers and graduate students with a background in thermodynamics and fluid mechanics. It is mostly qualitative, to illustrate the physical aspects of detonation. Classical theories of detonation waves are presented, followed by chapters on the unstable structure. The final chapters cover wave formation, problems, and future directions.

This is literally the bible on everything related to detonations and deflagrations. John Lee is one of the top researchers in shock waves and detonations, and his book reflects that. Although it is a bit hardcore at times, you can tell the author wants the reader to learn as much as possible about the detonation phenomenon.

Download to continue reading...

The Detonation Phenomenon Deflagration and Detonation Flame Arresters Connective Tissue Diseases: Holistic Therapy Options--Sjoegrens Syndrome; Systemic Sclerosis - Scleroderma; Systemic Lupus Erythematosus; Discoid Lupus Erythematosus; Secondary and Primary Raynauds phenomenon; Raynauds Disease; Polymyositis Dermatomyositis Who Tells Your Story?: History, Pop Culture, and Hidden Meanings in the Musical Phenomenon Hamilton Photobook Phenomenon The Ferrari Phenomenon: An Unconventional View of the World's Most Charismatic Cars The Phenomenon: Pressure, the Yips, and the Pitch that Changed My Life The Flintstones: A Modern Stone Age Phenomenon Regime and Periphery in Northern Yemen: The Huthi Phenomenon Inside Pee-Wee's Playhouse: The Untold, Unauthorized, and Unpredictable Story of a Pop Phenomenon Breaking the Spell: Religion as a Natural Phenomenon The Phenomenon of Man Phenomenon: Everything You Need to Know About the Paranormal The Ivory Tower and Harry Potter: Perspectives on a Literary Phenomenon Alien Romance: A Strange Phenomenon (Alien Escapades) Book 3): A Sci-fi Alien Warrior Invasion Abduction Romance Bram Stoker's Dracula: A Documentary Journey Into Vampire Country and the Dracula Phenomenon Angry White Male: How the Donald Trump Phenomenon is Changing America— and What We Can All Do to Save the Middle Class Angry White Male: How the Donald Trump Phenomenon is Changing America--and What We Can All Do to Save the Middle Class Jordan Spieth: Golf Prodigy to Golf Phenomenon: The Inspiring Story Behind Your Favorite Golfer's Humble Success (RebelReads Book 1) Pop Painting: Inspiration and Techniques from the Pop Surrealism Art Phenomenon

Contact Us

DMCA

Privacy

FAQ & Help