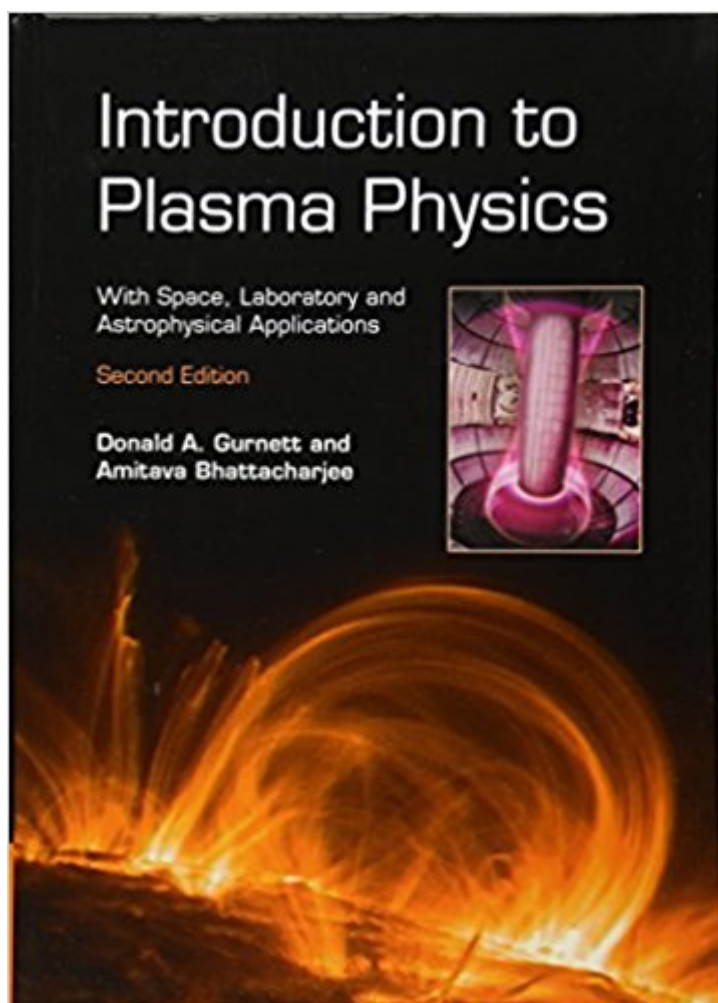


The book was found

Introduction To Plasma Physics: With Space, Laboratory And Astrophysical Applications



Synopsis

Introducing basic principles of plasma physics and their applications to space, laboratory and astrophysical plasmas, this new edition provides updated material throughout. Topics covered include single-particle motions, kinetic theory, magnetohydrodynamics, small amplitude waves in hot and cold plasmas, and collisional effects. New additions include the ponderomotive force, tearing instabilities in resistive plasmas and the magnetorotational instability in accretion disks, charged particle acceleration by shocks, and a more in-depth look at nonlinear phenomena. A broad range of applications are explored: planetary magnetospheres and radiation belts, the confinement and stability of plasmas in fusion devices, the propagation of discontinuities and shock waves in the solar wind, and analysis of various types of plasma waves and instabilities that can occur in planetary magnetospheres and laboratory plasma devices. With step-by-step derivations and self-contained introductions to mathematical methods, this book is ideal as an advanced undergraduate to graduate-level textbook, or as a reference for researchers.

Book Information

Hardcover: 532 pages

Publisher: Cambridge University Press; 2 edition (February 20, 2017)

Language: English

ISBN-10: 1107027373

ISBN-13: 978-1107027374

Product Dimensions: 6.8 x 1.1 x 9.7 inches

Shipping Weight: 2.5 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #360,462 in Books (See Top 100 in Books) #187 in Books > Science & Math > Physics > Nuclear Physics #1160 in Books > Textbooks > Science & Mathematics > Physics

Customer Reviews

Advance praise: 'Introduction to Plasma Physics, by Gurnett and Bhattacharjee, has been and with this new addition will continue to be my go-to plasma physics book for my research, and for the graduate course I teach in plasma physics.' L. A. Fisk, University of Michigan
Advance praise: 'With their second edition, Gurnett and Bhattacharjee have made a good textbook great. For students aspiring to pursue the broad field of plasma physics, this is the book of choice. Relevant examples from space and laboratory plasma physics bring the subject alive. The authors' clear writing is at the right level for advanced undergrads and graduate students and makes understandable the

important topical areas of plasma physics.' Michael Mauel, Columbia University

Introducing the principles of plasma physics and their applications to space, laboratory and astrophysical plasmas, this new edition has been thoroughly updated with step-by-step derivations and self-contained introductions to mathematical methods. It is ideal as an advanced undergraduate to graduate-level textbook, or as a reference text for researchers.

[Download to continue reading...](#)

Introduction to Plasma Physics: With Space, Laboratory and Astrophysical Applications Introduction to plasma physics and controlled fusion. Volume 1, Plasma physics Fundamental Aspects of Plasma Chemical Physics: Transport (Springer Series on Atomic, Optical, and Plasma Physics) Tokamak Plasma: A Complex Physical System, (Plasma Physics) Industrial Plasma Engineering: Applications to Nonthermal Plasma Processing, Vol. 2 Principles of Magnetohydrodynamics: With Applications to Laboratory and Astrophysical Plasmas Laser Interaction and Related Plasma Phenomena (Laser Interaction & Related Plasma Phenomena) Auroral Plasma Physics (Space Sciences Series of ISSI) Quantum Entanglement in Electron Optics: Generation, Characterization, and Applications (Springer Series on Atomic, Optical, and Plasma Physics) The Physics Of Laser Plasma Interactions (Frontiers in Physics) Numerical Simulation and Optimal Control in Plasma Physics: With Applications to Tokamaks (Modern Applied Mathematics Series) Laboratory Applications in Microbiology: A Case Study Approach: Laboratory Applications in Microbiology: A Case Study Approach Introduction to Plasma Physics The Dominion Astrophysical Observatory, Victoria, B.C.; A Sketch of the Development of Astronomy in Canada and of the Founding of This Observatory. a ... Details of the Telescope. an Account of the Welcome to the Universe: An Astrophysical Tour To Mars and Beyond, Fast!: How Plasma Propulsion Will Revolutionize Space Exploration (Springer Praxis Books) Fundamentals of Plasma Physics Plasma Engineering: Applications from Aerospace to Bio and Nanotechnology The Solid State: An Introduction to the Physics of Crystals for Students of Physics, Materials Science, and Engineering (Oxford Physics Series) Essential Laboratory Mathematics: Concepts and Applications for the Clinical and Chemical Laboratory Technician

[Contact Us](#)

[DMCA](#)

[Privacy](#)

